INVESTIGATION OF MILITARY PUBLIC WORKS

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES

EIGHTY-SECOND CONGRESS

SECOND SESSION

SUBCOMMITTEE ON MILITARY PUBLIC WORKS

JOHN J. RILEY, South Carolina, *Chairman*

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PART 3

DEPARTMENT OF THE ARMY

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INVESTIGATION OF MILITARY PUBLIC WORKS

DEPARTMENT OF THE ARMY

TUESDAY, MAY 20, 1952.

WITNESSES

BRIG. GEN. JOHN R. HARDIN, ASSISTANT CHIEF OF ENGINEERS FOR MILITARY CONSTRUCTION
HOMER F. CAREY, CHIEF OF ARMY PROJECTS DIVISION, CORPS OF ENGINEERS
HARRY B. ZACKRISON, CHIEF OF ENGINEERING DIVISION, CORPS OF ENGINEERS

Mr. RILEY. The committee will come to order, please. We are pleased to have General Hardin, Mr. Carey and Mr. Zackrison from the Army Engineers' office to testify with respect to the construction program. I will ask Mr. Donnelly to proceed with the hearing.

INTRODUCTORY STATEMENT OF SUBCOMMITTEE COUNSEL

Mr. DONNELLY. Mr. Chairman, this is the third phase of the hearings on the investigation of the military construction program for the zone of interior covering work performed in the calendar year 1951.

The Corps of Engineers, as the construction agency for the Air Force, constructed many of the Air Force installations which the committee considered in the second phase of the hearings, which covered the Air Force, and the corps representatives participated fully in those hearings.

I think the evidence which the staff has assembled here will fairly show that the problems in the Army area—that is, where the Corps of Engineers has been doing construction work for the Army—are similar in many respects to the construction problems which we have seen developed in the Navy and Air Force hearings. I have five points noted here which I think will occur several times in the course of these hearings.

First is the weakness in the management by the Corps of Engineers of CPFF contracts.

Second is the hasty negotiation of contracts. That is the negotiation of lump-sum contracts, as distinguished from competitive bid contracts. There is also the hasty letting of competitive-bid contracts.

The third point is again a peaking of obligations toward the end of the fiscal year, in the area of both year-end funds and no-year funds.

The fourth point is the overdesign of buildings and the failure to conform to the austerity standards in the early part of the construction program following Korea.

The last point is the standardization of design for barracks and similar structures.

That is by way of an introduction on my part, Mr. Chairman. I wonder if General Hardin has an opening statement to make to the committee.

General Statement

General Hardin. Mr. Donnelly, I did have an opening statement which I gave to you several weeks ago.

Mr. Chairman, Mr. Donnelly has given me an opportunity to prepare some comments on various charts included in previous testimony before this subcommittee which relates to obligations incurred by the Corps of Engineers for the Army and Air Force in fiscal years 1949, 1950, 1951, and to make other general statements pertaining to subjects which we have heretofore discussed.

PEAKING OF OBLIGATIONS

With respect to the peaking of obligations at the end of fiscal years, I think there are in general three basic factors which have led to this condition during these fiscal years; the late appropriation of funds, emergency conditions, and employment of "fiscal year" funds. During fiscal year 1949, obligations incurred for the Army construction program had a rather sharp rise in November which represented work in the zone of interior for which design was completed and could be obligated without delay. These funds were appropriated in June 1948. Obligations increased again in early spring to take advantage of the forthcoming construction season in various parts of the country and peaked to about $19,000,000 in May and declined to $11,000,000 in June. This pattern might be said to be normal, where funds are made available in the beginning of a fiscal year without having made provision for advanced design.

Only small amounts of Air Force work in the zone of interior were obligated before the end of this fiscal year because of problems in siting and agreement on plans and specifications. To the extent these problems were resolved, funds in the amount of $9,000,000 in June were obligated.

"No year" construction funds appropriated in fiscal year 1950 were largely for Alaska, Okinawa, and special programs such as Fence and the Arnold Engineering Development Center. These funds were appropriated in October 1949, with Arnold Engineering Development Center funds being provided in June 1950. It will be noted that funds were not appropriated until after several months of the fiscal year had elapsed and since funds had not been made available to design the work, design commenced after appropriations of the funds mentioned. Accomplishing the necessary design, advertising for bids, and awarding contracts, resulted in the passing of an additional 3 to 6 months. For this reason, the bulk of the fiscal year 1950 appropriation was obligated in the latter part of the fiscal year. In the case of the Army, these obligations amounted to $4,000,000 in May and $1,000,000 in June. In the case of the Air Force, the sums are greater, since the appropriations were larger than those of the Army, but nevertheless were modest: $12,000,000 for April, $6,000,000 for May, and $13,000,000

for June. This pattern can be said to be typical where funds are received late in the fiscal year without provision for advanced design.

Construction funds for fiscal year 1951 were made available for both Army and Air Force in a series of regular and supplemental appropriations beginning in September and extending through May 1951. The second supplemental appropriation in January 1951 was by far the largest bill for both Army and Air Force. From the information made available by General Myers in previous testimony, it is quite apparent that there was great urgency behind the employment of these funds. The obligation rate was a measure of the accomplishment rather than a goal in itself. This attitude was not alone that of the Air Force, as similar objectives pertained to the Army program.

The charts also show the rate of obligation of fiscal year funds insofar as these funds were turned over to the Corps of Engineers district offices for use in rehabilitation projects. As you know, these funds are generally employed at posts, camps, and stations, under the direction of the various commands. When the proposed work is beyond the capabilities of the post engineers, it is then that the district engineers are called upon for assistance. The employment of these funds on rehabilitation work and major repairs will generally be deferred until late in the fiscal year for the simple reason that priority must be given to day-to-day operation and maintenance, and certain reserves retained by the operating agencies for emergencies which might arise, such as damage by wind, fire, or other unforeseen requirements. It is therefore toward the end of the fiscal year that the various commands firm up their plans for undertaking those things which require major construction effort. There are never sufficient funds available to accomplish everything which is desirable, therefore we find them holding on to their funds until they are satisfied it is safe to undertake the services which we are requested to perform. This amount of work is, however, rather small in magnitude.

In the spring of 1951, funds were made available for the advance planning of the fiscal year 1952 program for both the Army and the Air Force. We were able to let contracts with architect-engineers during the summer and early fall for the design and preparation of plans and specifications. In our opinion, this arrangement is in the right direction to promote efficiency and economy and should be continued. Even though Congress was not able to complete the appropriation action until late December, the design effort was nevertheless proceeding in a normal manner. We were able to have a considerable amount of the planning completed by the end of calendar year 1951, and when funds were made available to us, contracts could be entered into immediately. We avoided placing a large amount of work on the construction industry at any one time and have been able to obtain very favorable bid prices. From a construction standpoint it would even be preferable to have design authority a year in advance of the appropriation of construction funds, but of course the time element must be considered in all military undertakings. Better estimates could be presented to the Congress if the work could be engineered in large measure before funds are requested. However, in a rapidly moving situation, and in such an emergency as we have had, this deliberate procedure is recognized as being impractical because under such circumstances the planning agencies are not even in a position

to tell us what to design. As a compromise, it is urged that planning money be made available well before funds are appropriated and as soon as the program is firm.

USE OF COST-PLUS-FIXED-FEE CONTRACTS

After a good bit of experience with various kinds of contracting procedures, the Chief of Engineers is firmly of the opinion that it is in the best interests of the Government to accomplish construction by formally advertising the work and competitive bidding procedures. We realize that emergencies and special conditions require the adoption of special methods. If work must be undertaken without having had time to prepare plans and specifications, the cost-plus-fixed-fee type of operation is generally recognized as being the only alternative which a construction agency has. In the rehabilitation of technical facilities such as ordnance plants which were laid away after World War II, the time involved in preparing plans for competitive bidding for placing these plants back into operation would be prohibitive. Also, the expense involved in disassembling the plants for inspection and determining what work should be done would be practically as great as performing the work itself. Therefore CPFF operations for the rehabilitation of technical facilities is generally the best approach. If the work is of a simple character we can still do it by competitive bidding or at least by negotiation with a selected group of qualified contractors.

Buying time was mentioned in previous discussions, and where time is a vital element of a construction undertaking we expect to have to pay a premium over normal construction methods and costs in order to get construction work completed in the desired time. The extensive use of overtime in such undertakings is only part of the problem. Procurement action which must be entered into hastily is also a major contribution to the additional costs incurred. In any military program I presume there will always be places for buying time. In combat operations, time is frequently the most important element. Mobilizing for defense will generally involve undertaking work where adequate planning time is lacking. We believe that use of CPFF contracts as a permissible form of doing business must be retained. It was recently necessary to undertake, on an emergency basis, the rehabilitation and expansion of a vital facility for the support of the current tank program. The only reasonable approach was to use a CPFF type of operation. We feel, however, that CPFF work should be limited strictly to those situations where no other procedure is practical. Similar reasoning causes us to adopt the policy that the use of negotiated lump-sum or unit-price contracts should be entered into only when it is clearly impractical to adopt any other procedures. As you know, no funds appropriated under the second supplemental appropriation bill, 1952, can be expended on CPFF contracts exceeding $25,000 in the zone of interior without the approval of the Secretary of Defense. It is the policy of the Chief of Engineers to cause our field agencies to obtain his approval for using a negotiated as well as a CPFF contract.

Another clause in the 1952 appropriation bill pertaining to military construction prevented the use of those funds for expediting construction. Current operating procedures require our district engineers to

prepare their working estimates before bids are requested on the basis of economical procedures which are standard for the construction industry. If the completion date arrived at on this basis is unsatisfactory to the using service, the using service is required to make a presentation through their own channels to the Department of Defense. The Corps of Engineers furnishes the using service with the estimated additional cost for meeting the expedited construction date. The Secretary of Defense must then make a decision on the justification presented. Up to the present moment no funds from the second supplemental appropriation bill for 1952 have been authorized to be used for expediting construction.

In addition to the use of standard bidding procedures, the Corps of Engineers endeavors to give the contractors ample time in preparing their bids. Normally, district engineers advertise the work for 30 days unless the project is a small or very large one, under which conditions a 15-day period may be quite sufficient or several months might be required for the larger or more difficult undertakings. Short bid periods are not good business. Contractors will add contingencies to cover the possibility of error and inability to make a comprehensive study of the site, working conditions, and availability of labor.

I think it is fair to state that in contracting for construction, as in anything else, you generally get what you pay for. It is this attitude which leads the Corps of Engineers to be cautious in the use of liquidated damages. Our construction policy permits the use of liquidated damages in negotiated or advertised contracts whenever time is of the essence; these damages to be sufficiently high to protect the Government against loss but not so high as to constitute a penalty. If liquidated damages are not fixed and agreed to in the contract document, the Government is still protected by a contract clause against actual damages occasioned by the contractor's delay. These actual damages might take the form of additional inspection expense or other provable damages.

AUSTERITY STANDARDS ADOPTED

In addition to obtaining the best return to the Government for each dollar expended by utilizing the contracting procedures I have mentioned, the Corps of Engineers has also endeavored to conserve in money and materials by the enforcement of austerity in the construction program. Although this accomplishment has been a gradual one and is still under way, we have made considerable progress. Prior to March 1951, it was the policy of the Department of the Army to provide permanent construction by June 30, 1962, for those elements and activities of the Regular Army to be located in the continental United States. It was furthermore the objective of the Department that careful judgment be exercised in the choice of architectural style and building materials with a view to harmonizing to local building practices and existing architectural styles, at the same time avoiding costly embellishment of the structures. However, after March 1951, new policies were developed for permanent construction resulting in simplification in design and in the adoption of construction materials more in keeping with the austerity program, and paying less attention than heretofore to adjacent architectural patterns. A new standard permanent barracks has been adopted which includes exposed concrete

beams and columns on the exterior of the structure and utilizing concrete block for curtain walls. Considerable opposition to the use of this type of construction has had to be overcome. The manufacturers of building materials have also objected to this type of standardization. We believe that the present standards are very economical. It is not our intention, however, to be restrictive and, therefore, we have adopted policies which permit alternate bids to be submitted and considered so long as the proposed alternates conform to the standards and appearance, quality, life expectancy, fire resistance, insulation, maintenance, economy, structural soundness, and completeness of equipment, to those required for equivalent items in the Government plans and specifications. While we have encouraged to a degree the submission of alternates, they are in no sense an obligation on the part of the construction contractor, but it does leave the gate open to those who wish to bid on alternates in competition with the Government design.

SUPERVISION OF MILITARY CONSTRUCTION PROGRAM

The supervision of this very large construction program for the Army and the Air Force is provided through the three echelons of the Corps of Engineers: the Office of the Chief of Engineers, the division engineers, and the district engineers. Necessarily, most of the supervision is on the district level. We are accomplishing the engineering and a large part of the inspection by engaging those architect-engineer firms which are best qualified for the job, giving preference of course to those firms near the work. Our division engineers have been given broad authority to supervise the districts under their control. Matters of policy and procedure, standard plans, basic engineering instructions, are issued by the Chief of Engineers, but the implementation of these authorities is largely under the supervision of the division engineer and his staff. This decentralization to division engineers is considered of vital importance to the success of our program in peace, in war, or in the current emergency. If the manifold problems involved in the execution of this program were permitted to come to Washington, we are convinced that we would soon fail. However, the Chief of Engineers and his staff, which is modest in number, do influence to a considerable degree the field operations by inspections, conferences, and progress reports. Only the most important matters of decision are referred to the Office, Chief of Engineers. Plans and specifications are furnished the Office, Chief of Engineers so that our review of these plans will enable us to judge the adequacy of the field offices' performance but in no way is the progress of the work delayed by reserving approval at the Washington level. We send out inspection teams to inspect the adequacy of the work, compliance with construction policies particularly the criteria on austerity, and also through inspection procedures we maintain a check on the administrative procedures and control of funds. Our civilian engineers are constantly on the move for consultation and advice in the division and district offices.

With personnel ceilings frozen in Washington, it is necessary for us to find ways to accomplish our tasks without recourse to an increase in numbers. The entire military construction effort at home and abroad for which the Chief of Engineers holds direct responsibility is

being supervised by approximately 12,000 employees, covering both technical and administrative classifications. We prefer to use the engineering profession and the construction industry rather than build up large governmental forces. Under present circumstances, our career employees are handling a tremendous burden. The present programs for both Army and Air Force involve over $3,000,000,000 of contracts in force. We believe they are doing a creditable job. We know that errors have been and are being made. When we find these errors, we take steps immediately to correct them.

I assure you, Mr. Chairman, that we welcome the constructive criticism of this committee. We will be grateful for your support in improving the program for the future.

Mr. RILEY. Thank you, General Hardin.

RESTRICTIONS ON EMPLOYMENT OF CIVILIAN PERSONNEL

What restrictions do you have on employment of civilian personnel in the engineers' office?

General HARDIN. In the Office of the Chief of Engineers?

Mr. RILEY. Or in your district offices, also. I suppose the same rule would apply.

General HARDIN. Well, not so rigidly. We are able to get larger numbers in the field as it is necessary to recruit them. There has not been the freeze on the engagement of civilian services by recruitment in our organization in the field such as there has been in Washington. Ever since last fall we have been absolutely frozen and could not engage another person for duty in the Office of the Chief of Engineers. Our staff is frozen at a figure of approximately, for military construction purposes, I believe in the neighborhood of 335 to 350 people.

Mr. RILEY. Is that restriction imposed by the Congress, or by the Department of Defense, or by the Chief of Staff, or by whom?

General HARDIN. I think it was imposed by the Department of Defense. I do not know after what action outside. We received our instruction, of course, from the Department of Defense.

AVAILABILITY OF TRAINED CIVILIAN PERSONNEL

Mr. RILEY. Is it possible for you to get trained civilian personnel, if you have the authority and the funds to do so?

General HARDIN. It is extremely difficult, Mr. Chairman, to recruit engineering personnel. The competition is so great in industry and among the civilian sources on account of the higher wage rates that they can pay and many other attractive features that we have experienced great difficulty in trying to recruit the necessary additions to our forces. That has been true for many years, as a matter of fact.

RESTRICTIONS ON CALLING IN EXPERIENCED ENGINEER RESERVE OFFICERS

Mr. RILEY. The other day when General Nold was testifying before the committee I asked him whether or not they had a pool of reserve engineering officers who could be called in in case of an emergency, and as I recall his testimony he said that for some time you were

restricted to calling in men of the rank of captain and lower. Of course, you cannot get the experience necessary in that grade of officer, the experience which would be required for projects of the magnitude which you are undertaking.

As I remember further, I think he said the engineers were finally given authority to call in 25 officers above the grade of captain.

Do you know whether or not there are in the Reserve Corps experienced men who are above the grade of captain who could have been called in to help you with this emergency program?

General HARDIN. Well, I think that our Engineer Reserves have many well-qualified engineers both from the standpoint of design and from the standpoint of construction. However, in the limited emergency we are now in, it is my understanding that those men could not be called against their will.

Mr. RILEY. They called them into other branches of the service in spite of the fact that some of them objected very strenuously and put up some pretty good hardship reasons for not being called.

General HARDIN. I am not too well qualified to discuss that particular phase with you, but I know I could get the Assistant Chief of Engineers for Personnel to cover that phase with you without very much delay, if you would like.

Mr. RILEY. I think it would be very beneficial to the committee to know that. My purpose for exploring both the civilian personnel and the Reserve military personnel is that I am rather convinced that in this tremendous emergency program which the Engineer Corps faced, the corps was understaffed. I think the other members of the committee will agree with me. I want to know whether or not all phases of getting adequate experienced expert personnel into the service to help with this were explored, and whether or not every effort has been made to get them, and every avenue explored. If it has not been, then I think there ought to be some good reason advanced why it was not done.

General HARDIN. Well, if I may, I would like to arrange for the appearance of someone in the Personnel Division to discuss that matter with you. Having had recent experience in the field, I am rather well acquainted with the great competition which exists in America today for the civilian engineer's talents. It was even the subject of an article in Time magazine only a couple of weeks ago.

Mr. RILEY. Off the record.

(Discussion off the record.)

DEVELOPMENT OF STANDARDIZED PLANS FOR BUILDINGS

Mr. RILEY. I note in your testimony that you have standardized on certain plans and specifications used on certain buildings, notably barracks buildings, warehouses, and things of that type. When did you agree on more or less standardized plans for buildings in common use on military bases, General?

General HARDIN. If I may, I would like to find my notes on that, Mr. Chairman.

Mr. RILEY. All right, sir.

General HARDIN. I am sorry I again left that particular envelope in the office, but the development of standard plans both for the Army and the Air Force has been a progressive development since Korea.

although prior to that time we did have standard plans for various types of construction for the Army, mainly in the emergency and modified emergency types, and the same thing applied to the Air Force in that certain standards had been arrived at in the way of definitive drawings, but it was not until after Korea, and Mr. Zackrison, who was directly in charge of that work, will bear me out or correct me if I am wrong, that the permanent type of construction received considerable attention in trying to arrive at a standard.

We had prior to Korea been making intensive studies of how to best construct these permanent buildings under more modern designs and the austerity program of the conservation of critical materials. We had, as I believe I mentioned previously to the committee, about that time enlisted the aid of the Bureau of Standards to assist us in the testing and in the development of specifications for concrete block.

Out of that rather lengthy study came the present standard which is typical of both Air and Army's permanent barracks or dormitories, which is a reinforced concrete mill-type structure. Individual beams and columns are exposed on the exterior surface of the structure and the filler material is generally concrete block, and the partition walls on the interior are concrete block.

Those standards were developed for houses, I would say, concurrently both for the Air Force and the Army, although I believe the standard was developed first for the Army. Would you, Mr. Zackrison, care to elaborate on that?

Mr. ZACKRISON. First, prior to Korea their program generally was not sufficiently large, not having a sufficient number of repetitive type of structures to warrant the preparation of any great number of standard plans. In other words, there is no point in preparing standard plans if you are not going to use them for more than one location.

We did have standard plans for one 225-man barrack, and the only place that was built, as I recall it, was at Camp Lee. We had no construction of any barracks until Korea came along, or approximately Korea. So, when we reviewed our anticipated program for 1951 we were able to determine that there was a sufficient number of structures to warrant the preparation of standard plans for such things as barracks and warehouses. So, we carefully studied the program to insure that we did not prepare them for types of construction or types of buildings which were only going to be built once, twice, or three times throughout the country. Obviously the type of construction in California differs from that in New England in that you have to have different designs. Your rainfall varies markedly from that in Texas and Louisiana, and up in New England you have different types of heating systems and capacities. It would be, for instance, a waste of money if we designed roofs, having roofs to take the same roof-load in Florida as in New England. These factors are multiplied many times to insure that the type of structure built in each locality will be as economical for that locality as is reasonably proper without expending needless design funds.

Mr. RILEY. Mr. Zackrison, you could have some general plan with modifications to suit the various localities such as insulation, heating, the roof structure, and things of that kind, but your general lay-out could be similar and would suit all locations?

Mr. ZACKRISON. That is our theory, and that is what our definitive drawing tries to cover. It shows a standard lay-out for the country as a whole, and then it would be modified in preparing drawings for each individual locality. Prior to Korea we had virtually hundreds of such definitive drawings which were prepared and distributed to all of our field areas. It happened, however, that our program was not sufficiently large to utilize those definitive drawings for construction purposes.

Mr. RILEY. I believe we have had testimony here during these hearings that there have been considerable numbers of changes made on the various bases in the plans and specifications for buildings in common use on those bases, and very often an architect-engineer is employed to draw the plans for some particular base, and he always has his own individual ideas that he tries to incorporate in them. Those things, it would seem to me, tend to run the cost of the construction up, whereas, if you use these more or less standardized plans, the contractors would become familiar with them and learn to expedite construction and to set up their construction force and get the construction done in the shortest possible time and in the most economical manner.

Off the record.

(Discussion off the record.)

Mr. RILEY. On the record.

DIFFERENCE IN CONCEPT IN CONSTRUCTION FOR BARRACKS AND MESSING FOR AIR FORCE AND ARMY

General Hardin, is there any different concept in construction for barracks and messing for the Air Force and the Army?

General HARDIN. Yes, sir.

The Army concept is to maintain the integrity of the squad, in that they will live together, and the Army also feels that it is highly desirable to provide messing facilities within the barracks in order to create the experience and ability that their cooks, mess sergeants, and others preparing and serving food to the company must have to become proficient in the performance of these duties in the field.

Now, on the other hand, the Air Force being differently organized, and usually based at permanent establishments well to the rear are in a position to depend upon mass feeding, and the necessity for having small units able to carry on the preparation and cooking of food is not so essential to the Air Force as it is to the Army.

In the Air Force, as has been stated before the committee, it is felt that the dormitories should be divided into small living spaces in order to permit the men to come and go without disturbing other men in the organization.

The Air Force has to, of course, operate around the clock and to get their men trained for day and night operations. This poses a problem in having some men sleep during the daytime when others are out for training.

The Army barracks are designed to provide, then, space for the squad, smaller spaces for certain noncommissioned officers, messing facilities for that unit, and a unit supply activity including a supply room for the receipt and issue of property.

The Air Force generally depends upon separate messes of large size, of 500- to 1,000-man capacity, and prefers to have its supply activities in separate structures from its dormitories.

In summary, I think the different attitudes are based upon the different concepts of training.

Mr. RILEY. It is possible, though, is it not, that you could have more or less a standard plan for barracks in the Army, and one for the Air Force and modify those plans and specifications to take care of the difference in construction which is necessary in different areas of the country because of the difference in temperature, snow, storm, and other local conditions?

General HARDIN. Yes, sir.

Mr. RILEY. If that is done and the contractors have had actual experience in building these buildings which are in common use on every base they can discover by actual experience the bottlenecks and improve their procedure and expedite their construction and so will be able to give you the same building, or, perhaps, a better building at a lower cost?

General HARDIN. Yes, sir; I agree with that.

STANDARDIZATION OF PLANS FOR AIR FORCE TECHNICAL AND ADMINISTRATIVE FACILITIES

I might add, Mr. Chairman, that we have now developed for the Air Force many, many plans which are not only for housing of troops but also to take care of their requirements for many technical and administrative facilities, and the list of these plans that are now termed "standardized" has reached a very large number. I do not have that available to me. Mr. Zackrison may recall something on that subject.

Mr. ZACKRISON. I do not have the figures exactly at hand.

General HARDIN. We are currently reviewing all of these plans with the Air Force and arriving at the expedited building which will be utilized in their 1953 supplemental and 1954 budget programs.

SCREENING AND REDUCING INDIVIDUAL PLANS AND SPECIFICATIONS DURING EMERGENCY

During the early portion of this emergency on account of the extreme need for accomplishing construction in a short time it was necessary to give the definitive drawing requirements to our various divisions and have them develop the detailed plans and specifications for the variety of structures required in the program, and in that procedure there were several plans developed for the same definitive drawing. We endeavored to keep the number of plans to the minimum in this critical period after Korea and began a system of weeding out the less desirable and standardizing on the most desirable detailed plans, having one of our divisions use the plans prepared by another division without any duplication of effort after the initial period, and we now have, I would say, 40 or 50 plans that will cover a variety of structures that can be adopted as standards.

Mr. RILEY. Then, in the testimony given by the Air Force I gathered the impression that they have not settled on a plan that they feel absolutely meets their requirements as yet.

General HARDIN. For their dormitories?

Mr. RILEY. Yes, sir.

I am just wondering why it takes them so long to make their decision: In view of the experience they have had, and in view of the number of plans that have been submitted, it would seem to me that somebody ought to say this is it and quit trying to anticipate what is going to happen in the future, and get down to the present so that you will not have to revise your plans and specifications so often and thereby eliminate a great deal of this preliminary planning work. Is that a logical conclusion or not?

Mr. ZACKRISON. Yes, sir; except that I might add that experience has shown that by the building of these various structures that there are certain economies that can be made and it would be logical to incorporate such savings as are evidenced by our construction experience in future buildings. Because of that, together with the changes in the desires of the Air Force for these individual toilets and lavatories, we are presently engaged in making a comparative study perhaps to prepare complete working drawings after decision by the Air Force as to the type of plan they desire.

Mr. DONNELLY. Off the record.

(Discussion off the record.)

Mr. RILEY. General Hardin, in your opinion, is it possible to get a decision in time to incorporate the features that the Air Force wants and prepare plans for construction out of the 1953 requests? Off the record.

(Discussion off the record.)

General HARDIN. I think it is possible, Mr. Chairman, and it is also our objective.

Mr. ZACKRISON. Yes, sir; that is correct.

Mr. RILEY. To settle on something for this 1953 money?

General HARDIN. That is, for the Air Force?

Mr. RILEY. Yes.

General HARDIN. The Army, I think, is quite well satisfied with their structure.

Mr. RILEY. I understood you to say the Army has pretty well decided on what they are going to have?

General HARDIN. Yes.

Mr. RILEY. Now, if these Army decisions are made it would eliminate a lot of change orders?

General HARDIN. Yes, sir.

Mr. RILEY. And also eliminate a lot of expense?

General HARDIN. Yes, sir.

Mr. RILEY. As Mr. Zackrison has said, there are certain modifications that we all realize have to be made, and we learn to do things a little better as we go along, and, naturally, we want to incorporate those, but the basic plan would still be there and these modifications would not cost the Government too much, and, possibly, their incorporation would offset other costs such as maintenance and use.

Mr. Davis.

ORGANIZATION DIVISION OF AUTHORITY IN THE LETTING OF CONTRACTS

Mr. DAVIS. General, I do not think any of us here will express any concern with the objectives which you have set forth in your general statement. I imagine that the only thing that will be developed here now is to try to find out how well you have lived up to the objective you have set. So that we may have a rather clear picture of it, would you review for us the division of authority with respect to the letting of contracts? In other words, give us a general picture. What freedom does the district office have, and then your division office, and what are the decisions that you have to refer to the Office of the Chief before you can go ahead?

PLANS AND SPECIFICATIONS

General HARDIN. Well, let us deal in the field of plans and specifications first, Mr. Davis.

The Chief of Engineers in the beginning of this emergency decentralized to the field, that means the division and district offices, the preparation of the plans and specifications in general. The Chief of Engineers did issue the criteria, the policy, the orders, and regulations which pertain to format of the plans and specifications, and in addition to that the Engineering Manual which is published in the Office of the Chief of Engineers for the guidance of all field agencies, specified the standards, the design criteria, and the general nature of the construction to be provided for the Army and the Air Force.

The district engineer has the responsibility of the preparation of these detailed plans and specifications which become a part of the contractual instrument.

The division engineer is responsible for the review of the plans and specifications and the approval of certain portions of these engineering undertakings. There is not too much rigidity to that. The division engineer has considerable freedom of action as to what extent he will decentralize to his districts the complete authority for the preparation of plans and specifications. In general, it is pretty broad. It is in the district's hands. The division, however, is definitely responsible for the sufficiency of the design and the technical specifications. Usually it works out that the division has their advisers and consultants constantly in the field with the districts, and rather than waiting for the district to complete its work and submit it to the division office for approval it is generally carried out with the division and district working on that concurrently so that there is no time lag by preparing a lot of papers and sending them forward for approval, but we try to have the plans and specifications prepared so that when they are completed in the district they are agreeable to the division office and will not have to be revised again. That, in general, is the picture on the preparation of plans and specifications. Do you have anything to add to that, Mr. Zackrison?

Mr. ZACKRISON. There might be two thing. I do not think you mentioned our guide specifications which must be used in the preparation of project specifications as they are applicable. They cover a variety of circumstances and conditions. We will, say, have 10 or 15

different types of roofing, and one will be selected and that must be used without change. By that means we control the quality and the types of individual applications of materials on a given job.

In addition there was one point I do not believe you mentioned. We do have standard-form regulations pertaining to space, such as space allowance and general standards of quality of construction which guide us in our thinking. I believe that covers the other point that might not have been mentioned.

General HARDIN. If I did not elaborate on it sufficiently that, in effect, is what I meant by establishing criteria and format.

PREPARATION OF ADMINISTRATIVE FEATURES OF CONTRACT

Besides the preparation of the technical portion of the contract, there comes the matter of the preparation of the administrative features of the contract. Those are uniform, applied to all of our contracting officers in that some of them are based upon law; some of them are based upon instructions from the Department of Defense, or the Army, and upon fiscal procedures of long standing. Some of this is custom as well as legal requirements. Nonetheless, we do have a form to follow which is a guide to the field and which is supposed to be followed quite rigidly. We call them guide specifications. I have a copy of a guide specification for part of our general conditions here before me covering such things as how to design the scope of the work, the character of the work, use of subcontracts, samples and descriptive data, suspension of work and use of domestic articles, and so forth.

AUTHORITY TO ENTER INTO CONTRACTS

Now, with regard to the authority to enter into contracts: In time of emergency there is a tendency for the Department of the Army, and I guess Defense, to decentralize operations in order to eliminate time delays. And in these periods of emergency you find more authority to obligate the Government is given out to the field agencies than you would find in times of less stress. At the present time, dealing in terms of the negotiated form of contract as an example, the Chief of Engineers is given authority to make contracts up to $15,000,000 on either a negotiated or a cost-plus-fixed-fee basis, assuming, of course, that you are complying with the provisions of existing law, such as the 1952 act, which did require the Secretary of Defense to approve the undertaking of a cost-plus-fixed-fee contract.

Then the Chief of Engineers decentralized that authority to give to the field permission to enter into negotiated contracts at the district level, in the amount of $5,000,000, without submission to the Office of the Chief of Engineers, or to the division engineer, and the division engineer was likewise given authority to award a negotiated contract up to the full amount which had been given to the Chief of Engineers for $15,000,000. If the contract is larger than $15,000,000 it must come into the Office of the Chief of Engineers for, first, his approval, and then submission to the Secretary of the Army for approval.

Following with the competitive type of construction contract, there are no limitations that I can recall on the actual making of an award. It is all in the hands of the district. In other words, if an operation is advertised on a competitive basis, the procedures are followed so

that there are no irregularities in the bidding operation. The district can award up to the full amount of the contract, whatever that is. If there is any dispute, or if there are irregularities in the contractor's submission—depending upon the seriousness of them and depending upon what is prescribed in the regulations—they must be sent forward for approval of the award to either the division engineer in certain instances, or the Chief of Engineers in other instances, even leaving it up to the Secretary if it is a serious departure.

DEFINED RESPONSIBILITIES IN ADMINISTRATIVE MATTERS

Now, there are defined responsibilities in great detail for the district, the division, and the Office of the Chief of Engineers in administrative matters. They cover several printed pages, and I will be glad to furnish the committee the orders and regulations which set forth these authorities many more than I have mentioned. They cover many more things than just contracting or preparation of plans and specifications. There are personnel actions; there are legal matters; there are many things associated with the expenditures of funds. There are accounting procedures and what not which I can present to you rather easily in the printed material in our orders and regulations.

Mr. RILEY. I would appreciate it if you would furnish Mr. Donnelly with a copy of that. There is a chance that we will want to incorporate it in the hearings somewhere.

(The material is printed in the appendix at p. 111.)

Mr. DAVIS. General Hardin, in connection with limitations, the dollar limitations on some of the actions that may be taken at the district level, have you run across any attempt at the evasion of those limitations through the splitting up of contracts?

General HARDIN. No, sir; I have not.

CONTRACTS SUBMITTED FOR APPROVAL BY THE SECRETARY OF THE ARMY

Mr. DAVIS. I would assume that only a very small number of contracts had been brought in for submission to the Secretary of the Army for his approval.

General HARDIN. Well, not too small, Mr. Davis. We have many large contracts in force right now on the cost-plus-fixed-fee or a negotiated basis. We have a tabulation of them. Anything over $15,000,000 has to be approved by the Secretary of the Army.

Mr. DAVIS. To the best of your recollection, have all the recommendations on such contracts been approved by the Secretary of the Army?

General HARDIN. I cannot recall of any instances in my period of service in the Office of the Chief of Engineers, beginning last July, where we have had anything returned disapproved. There have been instances where some corrections were necessary in the way of setting it in the proper form, or changing the wording, but that is all.

Mr. DAVIS. Those are simply what you would call administrative questions and not significant modifications of the substance of the recommendations which the corps had made?

General HARDIN. That is correct.

Mr. ZACHRISON. They did require different substantiations for different reasons, but it always stood up.

General HARDIN. I might add to my remarks of a little while ago about authorities that applied to our division and district organizations.

Now, there is a completely separate group of authorities which we use in connection with the operation of posts, camps, and stations under the repairs and utilities program, but that is under the command establishment rather than under the authority of the Chief of Engineers to supervise new construction.

RECENT PROGRESS MADE IN STANDARDIZATION OF PLANS

Mr. RILEY. General Hardin, I have in my hand a list of various types of buildings which are in use on the Army bases which I understand have been converted to permanent plans and specifications to be used generally throughout the military installations. Am I correct in that?

General HARDIN. Yes, Mr. Chairman. That list that you have is our latest compilation of standard plans which are in use, both for the Army and for the Air Force at this time. Some of those drawings, a few in number, are still in the definitive form, in the outline form, but essentially all of them are developed into complete working drawings.

Mr. RILEY. I notice that this index supersedes the index of December 21, 1951. Am I correct in assuming there are more permanent plans included in this list than there were in the December list?

General HARDIN. That is correct, sir.

Mr. RILEY. So, some progress is being made in having standardized plans for the entire Army and Air Force?

General HARDIN. Yes.

Mr. RILEY. The committee will recess until 2 o'clock this afternoon.

AFTERNOON SESSION

Mr. RILEY. The committee will come to order. I will ask Mr. Donnelly to proceed with the inquiry.

Mr. DONNELLY. At the outset, Mr. Chairman, I would like to insert in the record schedules showing the Army projects in the zone of the interior for the 14-month period ended August 31, 1951. Pertinent details with respect to the contracting for these projects is shown separately for cost-plus-fixed-fee, negotiated lump sum, and competitive bid contracts.

Mr. RILEY. Without objection the schedules will be printed in the record at this point.

(The schedules are on facing pages.)

SUNFLOWER ORDNANCE PLANT, LAWRENCE, KANS.

Mr. DONNELLY. Mr. Chairman, the first specific project to which I would like to invite the committee's attention involves the cost-plus-fixed-fee contract at the Sunflower ordnance plant, Lawrence, Kans.

I have here a summary of the facts as we found them on that contract, and I ask that it be incorporated in the record at this point.

Mr. RILEY. Without objection, it will be incorporated in the record at this point.

(The summary of facts referred to is as follows:)

ONTRACTS LET AT ESTIMATED C

. BASIS BY CORPS OF ENGINEER

LITARY CONSTRUCTION (ZONE O

OM 1 JULY 1950 THRU 31 AUGU

l Cost of ained In Minitive	6. Name Addre Contr Joint Mo.	10. Brief description of Work embodied In Such Increase
		pounds of [illegible] base powder per month to 5,000,000 pounds per month
		Repair of flood damage to river pipe line crossing and well water system facilities
		Installation of 9 steel storage tanks for storage of 93% sulphuric acid and oleum
,000	The H. New Yo	Construction of steam and hot water distribution system

S AMENDED 5 MAY 1952

mat #1

DATA ON A-E AND CONSTRUCTION CONTRACT

ON COST-PLUS-FIXED FEE BASIS

ARMY FUNDS FOR MILITARY

FOR PERIOD FROM 1 JU

Installation Name	2. Brief description of Work	3. No. of Contractors Considered	4. Date of Basic Definitive Contract (Day, Month, Year)	5. Estimated Cost of Work Contained in Basic Definitive Contract
ALABAMA				
Muscle Shoals Construction ASC-M	Chlorine Caustic Plant	1	11 Jan 1951	$ 18,700,300
KANSAS				
Pine Bluff Arsenal	Design and Construction of Approximately 151 Structures Including all Outside Utilities and Appurtenances	1	6 Oct 1950	28,115,500
ILLINOIS				
General Steel Casting Corporation	AECM a. Replace 3 Existing Heat Treating Furnaces. b. Construct: 1. 3 Additional Heat Treating Furnaces 2. Transfer Facilities. 3. Open Shed over Items "B-1" and "B-2" 4. Betatron Facilities 5. Minor Supporting Facilities for the Above Items	1	16 Jan 1951	1,974,262
Chicago Ordnance Plant	C-M Rehabilitation of Buildings, Doors, Unloading Docks, Miscellaneous Building Changes	6	5 Jul 1951	562,332
Elwood Ordnance Plant	AECM Rehabilitation of Fuse and Booster Facilities on 19 Groups	4	19 Mar 1951	2,211,011
Kankakee Ordnance Works	AECM Rehabilitation TNT and DNT Lines; Oleum Plant, Lead Azide Plant, Toluene, Trinitrol and Services	1	15 Dec 1950	7,926,621

ONTRACTS LET AT ESTIMATED COST OF $100,000 OR MORE

L BASIS BY CORPS OF ENGINEERS IN OBLIGATING

ILITARY CONSTRUCTION (ZONE OF INTERIOR)

OM 1 JULY 1950 THRU 31 AUGUST 1951

l Cost of tained In Minitive	6. Name and Address of Contractor (Name,City,State)	7. Amount of Basic Definitive Contract Fee to Contractor in Percentage	8. Percentage of Contract Paid For Administrative Overhead (If Contract Incomplete on 31 Aug 51 Percentage of Completion as of that Date	9. Amt. and Date of Each Increase of $100,000 or More Over Contract Amt. Through Change Orders, Addenda, Supplemental Agreements Etc.	10. Brief description of Work embodied in Such Increase
,300	Leonard-Monsante St. Louis, Mo	4.93%	2.6-(35%)	-	-
,500	Blaw-Knox Construction Co., Pittsburgh, Penna.	1.86%	2.4-(13%)	-	-
,262	General Steel Casting Corp., Granite City, Ill	2.0%	6.7-(20%)	-	-
,332	Mayfair Construction Co. Chicago, Ill	2.4%	15.4-(5%)	$344,210 3 Aug 1951	Construction of final systems testing area on parking lot site
,011	McGraw Construction Co. Middleton, Ohio	3.1%	3.5-(52%)	-	-
,621	U. S. Rubber Co. New York, N Y	1.3%	3.1-(73%)	-	-

Lines, Oleum Plant, Lead Azide Plant, Tolyne, Tetryl and Service

DATA ON A-E AND CONSTRUCTION CONTRACTS LET A

ON COST-PLUS-FIXED FEE BASIS BY CORP

ARMY FUNDS FOR MILITARY CONSTRU

FOR PERIOD FROM 1 JULY 1950

llation	2. Brief description of Work	3. No. of Contractors Considered	4. Date of Basic Definitive Contract (Day, Month, Year)	5. Estimated Cost of Work Contained In Basic Definitive Contract
Shoals Construction	Chlorine Caustic Plant	1	11 Jan 1951	$ 18,700,300
luff Arsenal	Design and Construction of Approximately 151 Structures Including all Outside Utilities and Appurtenances	1	6 Oct 1950	28,115,500
l Steel Casting ration	AECM a. Replace 3 Existing Heat Treating Furnaces. b. Construct: 1. 3 Additional Heat Treating Furnaces 2. Transfer Facilities. 3. Open Shed over Items "B-1" and "B-2" 4. Betatron Facilities 5. Minor Supporting Facilities for the Above Items	1	16 Jan 1951	1,974,262
o Ordnance Plant	C-M Rehabilitation of Buildings, Doors, Unloading Docks, Miscellaneous Building Changes	6	5 Jul 1951	562,332
Ordnance Plant	AECM Rehabilitation of Fuse and Booster Facilities on 19 Groups	4	19 Mar 1951	2,211,011
ee Ordnance Works	AECM Rehabilitation TNT and DNT Lines; Oleum Plant, Lead Azide	1	15 Dec 1950	7,926,621

S LET AT ESTIMATED COST OF $100,000 OR MORE

BY CORPS OF ENGINEERS IN OBLIGATING

CONSTRUCTION (ZONE OF INTERIOR)

LY 1950 THRU 31 AUGUST 1951

6. Name and Address of Contractor (Name, City, State)	7. Amount of Basic Definitive Contract Fee to Contractor in Percentage	8. Percentage of Contract Paid For Administrative Overhead (If Contract Incomplete on 31 Aug 51 Percentage of Completion as of that Date	9. Amt. and Date of Each Increase of $100,000 or More Over Contract Amt. Through Change Orders, Addenda, Supplemental Agreements Etc.	10. Brief description of Work embodied in Such Increase
Leonard-Monsante St. Louis, Mo	4.93%	2.6-(35%)	-	-
Blaw-Knox Construction Co., Pittsburgh, Penna.	1.86%	2.4-(13%)	-	-
General Steel Casting Corp., Granite City, Ill	2.6%	6.7-(20%)	-	-
Mayfair Construction Co. Chicago, Ill	2.4%	15.4-(5%)	$344,210 3 Aug 1951	Construction of final systems testing area on parking lot site
McGraw Construction Co. Middleton, Ohio	3.1%	3.5-(52%)	-	-
U. S. Rubber Co. New York, N Y	1.3%	3.1-(73%)	-	-

	Facilities			
INDIANA				
Hoosier Ordnance Plant	1st Phase - Rehabilitation Construction	3	16 Feb 1951	1,990,300
Jefferson Proving Ground	Rehabilitation Construction	3	19 Feb 1951	3,909,000
Kingsbury Ordnance Plant	AECM Rehabilitation of 2 Fuse Lines; 5 Loading Lines; 2 Primer Lines; 1 Detonator Line	4	3 Jan 1951	788,499
Wabash River Ordnance Works	AECM Type Rehabilitation of 5 Lines and Supporting Facilities, Applying of Asbestos Siding to Approximately 70 Wood Frame Buildings Presently Covered with Unpainted Wood Siding. Rehabilitation of 3 Former Farm Houses for use as Staff Houses.	1	5 Jan 1951	3,279,874
IOWA				
Iowa Ordnance Plant	Construction, Rehabilitation	14	23 Mar 1951	1,508,055
Iowa Ordnance Plant	Construction, Rehabilitation	3	2 Jan 1951	966,547
KANSAS				
Sunflower Ordnance Works	Architect-Engineer-Construction-Management Rehabilitation of Portions of Sunflower Ordnance Works	10	2 Jan 1951	3,909,667
MARYLAND				
Camp Detrick	Design and Construction of Expedited Program	1	6 Dec 1950	8,180,800

90,300	Whittenberg Construction Co. Louisville, Ky	2.56%	3.4-(34%)	$3,001,281 8 Aug 1951	2nd Phase - Rehabilitation Construction
09,000	Penker Construction Co. Cincinnati, Ohio	2.16%	6.9-(30%)	-	-
88,499	Tonn & Blank, Inc. Michigan City, Ind	3.0%	3.9-(95%)	1,160,622 S.A. #1 24 Apr 1951	Supplemental rehabilitation of contract requested by using service
79,874	Liberty Powder Co. East Alton, Ill	2.0%	4.3-(69%)	-	-
08,055	Silas-Mason Company Shreveport, La	2.9%	2.3-(78%)	-	-
66,547	Walsh Construction Company Davenport, Iowa	3.0%	1.2-(100%)	-	-
09,667	Massman Construction Co., S. Patti Construction Co., & Tanne and Mitchell, Joint Venturers, Kansas City, Mo.	2.63%	2.3-(83.7%)	Estimated cost $8,201,189 2 Mar 1951	Additional rehabil to increase plant duction from 3,500 pounds of HTH type base powder per da to 5,000,000 pounds month
				Estimated cost $493,702.50 17 Jul 1951	Repair of flood da to river pipe line ing and well water system facilities
				Estimated cost $238,300.50 27 Jul 1951	Installation of storage tanks for age of 40% sulphuric and oleum
0,800	The H. K. Ferguson Company New York 6, N Y	2.6%	3.2-(39%)	773,000.00 13 Aug 1951	Construction of st and hot water dis tribution system

COLUMN NO. 8 AMENDED 8 MAY 1952

	Facilities			
rdnance Plant	**1st Phase - Rehabilitation Construction**	**3**	**16 Feb 1951**	**1,990,300**
n Proving Ground	**Rehabilitation Construction**	**3**	**19 Feb 1951**	**3,909,000**
Ordnance Plant	**AECM Rehabilitation of 2 Fuse Lines; 5 Loading Lines; 2 Primer Lines; 1 Detonator Line**	**4**	**3 Jan 1951**	**788,499**
ver Ordnance Works	**AECM Type Rehabilitation of 5 Lines and Supporting Facilities, Applying of Asbestos Siding to Approximately 70 Wood Frame Buildings Presently Covered with Unpainted Wood Siding. Rehabilitation of 3 Former Farm Houses for use as Staff Houses.**	**1**	**5 Jan 1951**	**3,279,874**
ance Plant	Construction, Rehabilitation	14	23 Mar 1951	1,508,055
nce Plant	Construction, Rehabilitation	3	2 Jan 1951	966,547
Ordnance Works	Architect-Engineer-Construction-Management Rehabilitation of Portions of Sunflower Ordnance Works	10	2 Jan 1951	3,909,667
	Design and Construction of Expedited Program	1	6 Dec 1950	8,180,800

Whittenberg Construction Co. Louisville, Ky	2.56%	3.4-(34%)	$3,001,281 8 Aug 1951	2nd Phase - Rehabilitation Construction
Penker Construction Co. Cincinnati, Ohio	2.16%	6.9-(30%)	-	-
Tonn & Blank, Inc. Michigan City, Ind	3.0%	3.9-(95%)	1,160,622 S.A. #1 24 Apr 1951	Supplemental rehabilitation of contract requested by using service
Liberty Powder Co. East Alton, Ill	2.0%	4.3-(69%)	-	-
Silas-Mason Company Shreveport, La	2.9%	2.3-(78%)	-	-
Walsh Construction Company Davenport, Iowa	3.0%	1.2-(100%)	-	-
Massman Construction Co., S. Patti Construction Co., & Tanne and Mitchell, Joint Venturers, Kansas City, Mo.	2.63%	2.3-(83.7%)	Estimated cost $8,201,189 2 Mar 1951	Additional rehabilitation to increase plant production from 3,500,000 pounds of 7/7 double base powder per month to 5,000,000 pounds per month
			Estimated cost $493,762.50 17 Jul 1951	Repair of flood damage to river pipe line crossing and well water system facilities
			Estimated cost $238,300.50 27 Jul 1951	Installation of 9 steel storage tanks for storage of 45% sulphuric acid and oleum
The H. K. Ferguson Company New York 6, N Y	2.6%	3.2-(39%)	773,300.00 13 Aug 1951	Construction of steam and hot water distribution system

COLUMN NO. 8 AMENDED 6 MAY 1952

Exhibit #1 Cont'd

1. Installation Name	2. Brief description of work	3. No. of Contractors Considered	4. Date of Basic Definitive Contract (Day, Month, Year)	5. Estimated C Work Contai Basic Defin Contract
NEBRASKA				
Cornhusker Ordnance Plant	Construction, Rehabilitation	3	14 Dec 1950	$ 1,244,300
Nebraska Ordnance Plant	Construction, Rehabilitation	3	2 Jan 1951	683,000
NEW YORK				
RDM	Design, Engineering, Procurement, Construction and Preliminary Operation of Facilities	1	29 Aug 1950	39,796,380
OHIO				
Ravenna Ordnance Plant	Rehabilitation Construction Necessary for Phases I and II, Reactivation of Load Lines 1, 2, 3 and 4 and Auxiliary Lines	3	22 Dec 1950	1,454,705
PENNSYLVANIA				
Philadelphia Signal Corps Procurement Office	Alterations and Rehabilitation to Penn Athletic Club Building	4	8 Feb 1951	2,045,300
TENNESSEE				
Holston Ordnance Works	Construction, Rehabilitation Including Unwrapping and Placing in Operating Condition all Installed Equipment and Replacement of Parts for Line 2, Machine Shop and Administration Areas	12	27 Dec 1950	3,349,24

mated Cost of Contained In c Definitive ract	6. Name and Address of Contractor (Name, City, State)	7. Amount of Basic Definitive Contract Fee to Contractor in Percentage	8. Percentage of Contract Paid For Administrative Overhead (If Contract Incomplete on 31 Aug 51 Percentage of Completion as of that Date	9. Amt. and Date of Each Increase of $100,000 or More Over Contract Amt. Through Change Orders, Addenda, Supplemental Agreements etc.	10. Brief description of work Embodied In Such Increase
244,300	Silas-Mason Co. Shreveport, La	2.7%	2.1-(57%)	$4,409,800 19 Mar 1951	Lead lines 3 and 4, booster line and Administration area
683,000	Parsons Construction Co. Omaha, Nebr	2.7%	1.1-(90%)	2,809,029 17 Mar 1951	Alter lines 2, 3 an Construction center Technical Laborator bus terminal wareh and fire station
796,380	Vitro Corporation of America (Formerly Kellex Corp,) New York, N Y	0.82%	2.4-(42.6%)	5,171,510 2 Apr 1951 6,275,053 20 Sep 1951	(Increased scope of by AEM)(Increase i procurement by AE Increased scope of by AEM
454,705.50	The Hunkin-Conkey Construction Co., Cleveland 14, Ohio	2.796%	1.8-(92.4%)	2,039,947 16 Mar 1951	Additional rehabili work (Phase II) es for placing product lines in operating dition
045,300	Turner Construction Co. Philadelphia, Penna	1.93%	2.6-(49%)	-	-
349,249	John J. Harte Atlanta, Ga	3.47%	3.5-(47%)	7,742,763 increase in estimated construction costs, plus $130,805 increase in fixed fee, supplemental agreement No. 1 dated 13 Apr 1951	Rehabilitation of 1, 3, 4, 5, 6 and

	2. Brief description of work	3. No. of Contractors Considered	4. Date of Basic Definitive Contract (Day, Month, Year)	5. Estimated Cost of Work Contained In Basic Definitive Contract
...ance Plant	Construction, Rehabilitation	3	14 Dec 1950	$ 1,244,300
...nce Plant	Construction, Rehabilitation	3	2 Jan 1951	683,000
	Design, Engineering, Procurement, Construction and Preliminary Operation of Facilities	1	29 Aug 1950	39,796,380
...nce Plant	Rehabilitation Construction Necessary for Phases I and II, Reactivation of Load Lines 1, 2, 3 and 4 and Auxiliary Lines	3	22 Dec 1950	1,454,705.50
...gnal Corps ...ffice	Alterations and Rehabilitation to Penn Athletic Club Building	4	8 Feb 1951	2,045,300
...nce Works	Construction, Rehabilitation Including Unwrapping and Placing in Operating Condition all Installed Equipment and Replacement of Parts for Line 2, Machine Shop and Administration Areas	12	27 Dec 1950	3,349,249

6. Name and Address of Contractor (Name, City, State)	7. Amount of Basic Definitive Contract Fee to Contractor in Percentage	8. Percentage of Contract Paid For Administrative Overhead (If Contract Incomplete on 31 Aug 51 Percentage of Completion as of that Date	9. Amt. and Date of Each Increase of $100,000 or More Over Contract Amt. Through Change Orders, Addenda, Supplemental Agreements Etc.	10. Brief description of work Embodied In Such Increase
Silas-Mason Co. Shreveport, La	2.7%	2.1-(57%)	$4,409,800 19 Mar 1951	Lead lines 3 and 4, booster line and Administration Area
Parsons Construction Co. Omaha, Nebr	2.7%	1.1-(90%)	2,869,029 17 Mar 1951	Alter lines 2, 3 and 4, Construction center Technical Laboratory, bus terminal warehouse and fire station
Vitro Corporation of America (Formerly Kellex Corp,) New York, N Y	0.82%	2.4-(42.6%)	5,171,510 2 Apr 1951 6,275,053 20 Sep 1951	(Increased scope of work by AEM)(Increase in procurement by AEM) Increased scope of work by AEM
The Hunkin-Conkey Construction Co., Cleveland 14, Ohio	2.796%	1.8-(92.4%)	2,039,947 16 Mar 1951	Additional rehabilitation work (Phase II) essential for placing production lines in operating condition
Turner Construction Co. Philadelphia, Penna	1.93%	2.6-(49%)	-	-
John J. Harte Atlanta, Ga	3.47%	3.5-(47%)	7,742,763 increase in estimated construction costs, plus $136,805 increase in fixed fee, supplemental agreement No. 1 dated 13 Apr 1951	Rehabilitation of Lines 1, 3, 4, 5, 6 and 7

Wolf Creek Ordnance Plant	Construction, Rehabilitation Including Unwrapping and Placing in Operating Condition all Installed Equipment and Replacement of Parts for Reactivation of a Portion of the Plant	13	22 Dec 1950	1,017
VIRGINIA				
Norfolk Army Base	Rehabilitation, Construction	4	7 Apr 1951	677,
Radford Arsenal	Rehabilitation, Construction of Portion "C" Line and Backup Facilities	6	28 Dec 1950	2,903,8
WISCONSIN				
Badger Ordnance Works	AEC Contract- Rehabilitation of Rocket Powder Nitro Line	11	30 Jan 1951	10,305,

1,017,202	Forcum-James Co. Dyersburg, Tenn and Allen and Hoshall Memphis, Tenn	4.49%	3.8-(71%)	$ 303,709 increase in estimated construction costs, plus $8,100 included in fixed fee, Change Order No. 1 dated 13 Apr 1951	Rehabilitation a construction for X, C, D, E, H, T and areas I, and T
				404,856 increase in estimated construction costs (No change in fixed fee) Change Order No. 2 dated 3 May 1951	No additional w Change Order is revise estimate
				210,000 increase in estimated construction costs (no change in fixed fee) Change Order No. 3 dated 11 Jun 1951	No additional w Change Order is revise estimate
677,000	Tidewater Const Corp, Norfolk, Va	3.69%	1.6-(66%)	S. A. #1, 11 Jun 1951, increase $1,120,000	Additional reha over original s
				S. A. #2, 17 Oct 1951, increase $185,000	Additional reha over original s
2,903,843	J. A. Jones Construction Co., Charlotte, N C	2.32%	2.6-(95%)	C. O. #1, 12 Feb 1951, increase $1,896,157	No change in sc ditional fee
				S. A. #2, 2 Mar 1951, increase $3,700,000	Portions of res Line C and back Also portion of some procureme Line A
				S. A. #3, 8 Jun 1951, increase $3,800,000	Remainder of fa outlined in S.
				S. A. #4, 29 Jun 1951, increase $6,747,805	Remainder of li Miscellaneous i Portion of 4th powder area
				S. A. #5, 7 Sep 1951, increase $10,505,500	Portion of cas area
				S. A. #6, 31 Oct 1951 increase $1,605,051	Nitroguanidine
10,305,500	Fegles Construction Co. Minneapolis, Minn	2.58%	3.7-(77%)	1,398,200 25 Sep 1951	C. O. #1, Dele additions, alt requested by u

COLUMN NO. 8 AMENDED 5 MAY 1952

dnance	Construction, Rehabilitation Including Unwrapping and Placing in Operating Condition all Installed Equipment and Replacement of Parts for Reactivation of a Portion of the Plant	13	22 Dec 1950	1,017,202
Base	Rehabilitation, Construction	4	7 Apr 1951	677,000
al	Rehabilitation, Construction of Portion "C" Line and Backup Facilities	6	28 Dec 1950	2,903,843
ce Works	AEC Contract- Rehabilitation of Rocket Powder Nitro Line	11	30 Jan 1951	10,305,500

Forcum-James Co. Dyersburg, Tenn and Allen and Hoshall Memphis, Tenn	4.49%	3.8-(71%)	$ 303,709 increase in estimated construction costs, plus $8,100 included in fixed fee, Change Order No. 1 dated 13 Apr 1951	Rehabilitation and new construction for lines X, C, D, E, H, K, S, and T and areas I, J, P, R and T
			404,856 increase in estimated construction costs (No change in fixed fee) Change Order No. 2 dated 3 May 1951	No additional work. Change Order issued to revise estimate of costs
			210,000 increase in estimated construction costs (no change in fixed fee) Change Order No. 3 dated 11 Jun 1951	No additional work. Change Order issued to revise estimate of costs
Tidewater Const Corp, Norfolk, Va	3.69%	1.6-(66%)	S. A. #1, 11 Jun 1951, increase $1,120,000	Additional rehabilitation over original scope
			S. A. #2, 17 Oct 1951, increase $185,000	Additional rehabilitation over original scope
J. A. Jones Construction Co., Charlotte, N C	2.93%	2.6-(95%)	C. O. #1, 12 Feb 1951, increase $1,896,157	No change in scope; no additional fee
			S. A. #2, 2 Mar 1951, increase $3,700,000	Portions of remainder of Line C and backup facility. Also portion of Line B and some procurement for Line A
			S. A. #3, 8 Jun 1951, increase $3,800,000	Remainder of facilities outlined in S. A. #2
			S. A. #4, 29 Jun 1951, increase $6,747,805	Remainder of line B. Miscellaneous facility. Portion of 4th rolled powder area
			S. A. #5, 7 Sep 1951, increase $10,505,500	Portion of cast propellant area
			S. A. #6, 31 Oct 1951 increase $1,805,351	Nitroguanidine area
Pegles Construction Co. Minneapolis, Minn	2.58%	3.7-(77%)	1,398,200 25 Sep 1951	C. O. #1, Deletions, additions, alterations requested by using service

COLUMN NO. 8 AMENDED 5 MAY 1952

rmat No 2

DATA ON CONSTRUCTION CONTRACTS LET FOR

ON COMPETITIVE BID BY CORPS OF ENGINEE

ARMY FUNDS FOR MILITARY CONSTRUCTION

FOURTEEN-MONTH PERIOD ENDED 31

1. Installation Name	2. Brief Description of Work	3. Date of Design Authorization by Using Service or OCE (Day, Month, Year)	4. Date of Advertised for Construction Bids (Day, Month, Year	5. No of Days in Actual Bid Period	6. No of Bids Received	7. Date Contract Awarded (Day, Month, Ye
ALABAMA						
Redstone Arsenal	Const range bldgs and facs, auditorium, office and library bldg and addtl lab facs	28 Dec 49	20 Jul 51	32	6	27 Aug 51
CALIFORNIA						
Camp San Luis Obispo	Const. Initial rehabilitation	19 Mar 51	22 May 51	17	7	11 Jun 51
Middletown	Radio receiver station	28 Apr 50	24 May 51	7	6	31 May 51
Sacramento Signal Depot	Gen purpose wise and Signal maint repair shop	20 Dec 50	24 May 51	10	8	6 Jun 51
Sharpe General Depot	Two whses	2 Jan 51	16 Jun 51	5	7	25 Jun 51
Alameda Medical Depot,	Const cold storage plant	11 Sep 50	7 Mar 51	12	8	16 May 51
Hideway Proving Ground	Const 11 new bldgs in Area "B"	12 Apr 50	15 Feb 51	20	8	14 Mar 51
ILLINOIS						
Granite City Engineer Depot	Const of One General purpose warehouse and two open shed warehouses.	29 Dec 50	4 May 51	20	5	31 May 51
Granite City Engineer Depot	Const of electronic maint bldg and base maint shop annex	29 Dec 50	18 May 51	28	4	15 Jun 51
KENTUCKY						
Fort Campbell	8-225-Man barracks	19 Dec 50	11 May 51	28	9	6 Oct 51
Fort Campbell	Addtl Storage Facs	1 Mar 51	22 May 51	16	6	6 Oct 51

AT FOR $1,000,000 OR MORE

ENGINEERS IN OBLIGATING

CTION (ZONE OF INTERIOR)

ED 31 AUGUST 1951

te Awarded nth, Year)	8. Amt of Contract (Initial)	9. Name and Address of Contractor (Name, City, State	10. No of Days Allowed for Completion of Original Contract	11. Liquidated Damage per Day Specified in Contract	12. Amt & Date of Each Increase of $100,000 or More Over Original Contract Amt Through Change Orders, Addenda, Supplemental Agreements, Etc	13. Brief Description of Work Embodied in Such Increase
ug 51	$1,883,476.00	T. H. Pearce & Co, Columbus, Ga	270	-	-	-
un 51	$2,022,352.83	Zoss Const Co, Hollywood, Calif	144	-	-	-
ay 51	$1,048,122.00	Erbentraut & Summers, San Francisco, Calif	197	-	-	-
n 51	$3,096,771.00	MacDonald, Young & Nelson, Inc and Morrison-Knudsen Co, Inc, San Francisco, Calif	175	-	-	-
un 51	$2,448,500.25	Louis C. Dunn, Inc, San Francisco, Calif	187	-	-	-
ay 51	$1,383,400.00	Trewhitt-Shilds and Fisher, Fresno, Calif	188	$300	-	-
ar 51	$4,250,000.00	Moore & Roberts, Inc; B&R Const Co, San Francisco, Calif	260	$100 to $400	-	-
ay 51	$2,432,000.00	Albert-Carlo Const Co, St Louis, Mo	360	$200	-	-
un 51	$1,194,000	Albert-Carlo Const Co, St Louis, Mo	360	$200	-	-
t 51	$2,887,436.50	Southeastern Const Co, Charlotte, N. C.	300	-	-	-
t 51	$1,616,699.14	Robert E. McKee, Inc,	300	-	-	-

MISSOURI						
St Louis Medical Depot	Const contract. Rehabilitation of warehouse facs.	2 Jun 50	20 Dec 50	21	6	16 J
NEW MEXICO						
Sandia Base	Const contract for const of troop housing and auxiliary facs	26 Dec 50	3 Apr 51	17	7	1 Ma
NEW JERSEY						
Raritan Arsenal	Const of addtl facs	19 Dec 50	18 Jun 51	22	6	1 Au
NEW YORK						
U S Military Academy	Const of family type quarters	24 Jan 51	2 Mar 51	27	12	4 Ma
PENNSYLVANIA						
Tobyhanna Signal Corps Procurement Depot	Grading and drainage	30 Jan 51	28 May 51	22	9	20 J
Tobyhanna Signal Corps Procurement Depot	4 warehouses, including foundations	31 Jan 51	17 Jun 51	30	22	30 No
TEXAS						
Fort Bliss	Const contract for AFF Board No 4 and GM Center, 1st GM Group and training facs	21 Dec 50	21 May 51	15	6	18 Ju
Fort Worth GM Depot	Const contract. Two permanent warehouses	21 Dec 50	14 Mar 51	99	9	25 J
Fort Hood	Const contract - 8-225-man barracks	23 Dec 50	27 Jun 51	15	11	29 Ju
UTAH						
Dugway Proving Ground	Area "A" Bldgs and Utilities	12 Apr 50	15 Feb 51	20	6	13 Ma
Dugway Proving Ground	Roads, parking areas and runway (Schedule 1)	12 Apr 50	15 Feb 51	20	6	13 Ma
Dugway Proving Ground	Const of 11 new bldgs & flag pole in "B" area	12 Apr 50	30 Mar 51	20	4	24 Ap

		El Paso, Tex				
16 Jan 51	$1,708,999.75	Albert-Carlo Const Co, St Louis, Mo	120	$100	-	-
1 May 51	$3,650,252.12	Maxey & Leftwich, Lubbock, Tex	240	$785	-	-
1 Aug 51	$3,857,416.75	Arthur Venneri Co, Westfield, N. J.	360	$100	-	-
4 May 51	$1,576,395.00	Tandy & Allen, Inc, Hillsdale, N. J.	300	-	-	-
20 Jun 51	$2,899,579.50	Rochez Brothers, Inc, E. Pittsburgh, Pa	150	$225	-	-
30 Nov 51	$4,670,045.00	Consolidated Const Co, Inc, Woodbury, N J	330	$100	-	-
18 Jun 51	$1,308,520.05	J. E. Morman & Sons, El Paso, Tex	240	$250	-	-
25 Jun 51	$2,131,145.00	T. C. Bateson Const Co, Dallas, Tex	209	$100	-	-
29 Jun 51	$2,778,453.00	Nathan Kohlfeld, Dallas, Tex	300	$100	-	-
13 Mar 51	$1,342,133.43	M. H. Brock & Sons & R. J. Daum Const Co, Inglewood, Calif	350	$10 to $800 (Varies by type of bldg)	-	-
13 Mar 51	$1,498,721.00	W. W. Clyde & Co, Springville, Utah	350	$10 to $800 (varies by type of utility)	-	-
24 Apr 51	$2,467,550.00	Cahill-Mooney Const Co, Billings, Mont	300	$100	-	-

rmat No 2 (continued)

1. Installation Name	2. Brief Description of Work	3. Date of Design Authorization by Using Service or OCE (Day, Month, Year)	4. Date of Advertising for Construction Bids (Day, Month, Year)	5. No of Days in Actual Bid Period	6. No of Bids Received	7. Date Contract Awarde (Day, Month, Ye
VIRGINIA						
Fort Eustis,	Const of transportation school and adminstration bldg, development and experimental bldg, school bldgs, facs and utilities for shop area organizational motor pool	14 Dec 50	16 May 51	28	6	20 Jun 51
Fort Eustis	Const of 4-225 man barracks incl necessary outside utilities	22 Dec 50	13 Jun 51	14	4	29 Jun 51
Richmond QM Depot	Const of 2-200' x 900' general purpose warehouses	27 Dec 50	10 Jul 51	21	13	31 Jul 51
WASHINGTON						
North Richland	Const contract for rehabilitation and addtl bldgs and utilities	29 Mar 50	14 Apr 51	10	4	30 Apr 51
Yakima Training Center	Const of 30 - 80 EM barracks, 2 bn hdq admin and stg bldgs, 2 bn rec 7 classroom bldgs, 12 co admin stg & rec bldgs, 12 EM mess halls	5 Dec 50	12 Feb 51	11	16	28 Feb 51
Mt Rainier Ord Depot	Const of 2 perm type whses	21 Dec 50	9 Jul 51	15	7	29 Aug 51
North Richland	Const contract for rehabilitation of bldgs and utilities	29 Mar 50	15 Feb 51	21	11	16 Mar 51

te Awarded nth, Year)	8. Amt of Contract (Initial)	9. Name and Address of Contractor (Name, City, State	10. No of Days Allowed for Completion of Original Contract	11. Liquidated Damage per Day Specified in Contract	12. Amt & Date of Each Increase of $100,000 or More Over Original Contract Amt Through Change Orders, Addenda, Supplemental Agreements, Etc	13. Brief Description of Work Embodied in Such Increase
un 51	$7,424,000.00	Va Engineering Co, Newport News, Va	450	-	-	-
un 51	$1,685,673	States Const Co, Newport News, Va	450	-	-	-
ul 51	$2,021,294	Conquest, Moncure & Dunn, Inc, Richmond, Va	360	-	-	-
pr 51	$1,666,968	McPahil Engineering, Tacoma, Wash	200	$500	-	-
eb 51	$1,690,900	Drake & Mullen, Seattle, Wash	120	$200	$217,534 2 Jul 51	Installing gypsum wallboard in barracks and mess halls.
ug 51	$1,425,489	Zoss Const Co, Portland, Ore	210	$100	-	-
ar 51	$2,646,509.97	Sound Const & Engineering Co, Seattle, Wash	300	$250	-	-

rmat #3

DATA ON A-E AND CONSTRUCTION CONTRACTS

ON NEGOTIATED FIXED PRICE BASIS BY CORI

ARMY FUNDS FOR MILITARY CONSTRUCT

FOURTEEN-MONTH PERIOD ENDED

Installation Name	2. Brief description Of Work	3. Date of Design Authorization By Using Service or OCE (Day, Month, Year)	4. Date Negotiations Started With First Contractor (Day, Month, Year)	5. No. of Days Allowed Contractors to Submit Proposals	6. No. of Contractors Considered	7. No. of Proposals Received	8. Orig Date Awar Lett Othe (Day,
ARAVA							
Camp Rucker	Construction, Rehabilitation of Buildings	25 Oct 1950	21 Aug 1950	4	28	7	24
Ft McClellan	Construction, Rehabilitation of Buildings	26 Jan 1951	16 Feb 1951	8	39	21	17
Redstone Arsenal	Construction Chemical Laboratory, (Administration Engineering Building) and Miscellaneous Facilities	28 Dec 1949	2 Feb 1951	18	8	6	5

ONTRACTS LET FOR $1,000,000 OR MORE

BY CORPS OF ENGINEERS IN OBLIGATING

ONSTRUCTION (ZONE OF INTERIOR)

ENDED 31 AUGUST 1951

8. Original Date Of Award By Letter Or Otherwise (Day, Month, Year)	9. Were Plans & Specifications Fully Completed on Date of Award (Col. 8)? If Not, Date Completed (Day, Month, Year)	10. Amt of Original Contract	11. Name & Address of Contractor (Name, City, State)	12. No. of Days Allowed For Completion of Original Contract	13. Liquidated Damage Per Day, If Any Stipulated In Contract	14. Amt & Date of Each Increase of $100,000 or More Over Original Contract. Amt. through Change Orders, Addenda, Supplemental Agreements Etc.	15. Brief description Of Work Embodied In Such Increase
24 Aug 1950	Yes	$ 1,593,252.00	Henderson, Black & Green, Inc., Troy, Ala	111	-	$572,629 30 Aug 1950	Rehabilition of Additional Buildings and Roads in Zone C and Zone C-2
						153,692 13 Sep 1950	Rehabilitation of additional buildings
17 Feb 1951	Yes	1,100,056.00	T. H. Pearce & Co. Columbus, Ga	210	-	126,145 7 May 1951	Additional rehabilitation and repairs
						240,783 15 May 1951	Repairs and changes to 21 double mess buildings
						179,221 31 May 1951	Rehabilitation of additional buildings
						195,887 25 May 1951	Rehabilitation of additional buildings
5 Feb 1951	19 Oct 1951	1,533,975.00	Butler & Cobbs Montgomery, Ala	197	-	-	-

DATA ON A-E AND CONSTRUCTION CONTRACTS LET FOR $1

ON NEGOTIATED FIXED PRICE BASIS BY CORPS OF ENGIN

ARMY FUNDS FOR MILITARY CONSTRUCTION (ZONE O

FOURTEEN-MONTH PERIOD ENDED 31 AUGUST 19

ion	2. Brief description Of Work	3. Date of Design Authorization By Using Service or OCE (Day, Month, Year)	4. Date Negotiations Started With First Contractor (Day, Month, Year)	5. No. of Days Allowed Contractors to Submit Proposals	6. No. of Contractors Considered	7. No. of Proposals Received	8. Original Date Of Award By Letter Or Otherwise (Day, Month, Year)
r	Construction, Rehabilitation of Buildings	25 Oct 1950	21 Aug 1950	4	28	7	24 Aug 1950
an	Construction, Rehabilitation of Buildings	26 Jan 1951	16 Feb 1951	8	39	21	17 Feb 1951
rsenal	Construction Chemical Laboratory, (Administration Engineering Building) and Miscellaneous Facilities	28 Dec 1949	2 Feb 1951	18	8	6	5 Feb 1951

' FOR $1,000,000 OR MORE

' ENGINEERS IN OBLIGATING

(ZONE OF INTERIOR)

'GUST 1951

,Year)	9. Were Plans & Specifications Fully Completed on Date of Award (Col. 8)? If Not, Date Completed (Day, Month, Year)	10. Amt of Original Contract	11. Name & Address of Contractor (Name, City, State)	12. No. of Days Allowed For Completion of Original Contract	13. Liquidated Damage Per Day, If Any Stipulated In Contract	14. Amt & Date of Each Increase of $100,000 or More Over Original Contract. Amt. through Change Orders, Addenda, Supplemental Agreements Etc.	15. Brief description Of Work Embodied In Such Increase
950	Yes	$ 1,593,252.00	Henderson, Black & Green, Inc., Troy, Ala	111	-	$572,629 30 Aug 1950	Rehabilition of Additional Buildings and Roads in Zone C-1 and Zone C-2
						153,692 13 Sep 1950	Rehabilitation of additional buildings
951	Yes	1,100,056.00	T. H. Pearce & Co. Columbus, Ga	210	-	126,145 7 May 1951	Additional rehabilitation and repairs
						240,783 15 May 1951	Repairs and changes to 21 double mess buildings
						179,221 31 May 1951	Rehabilitation of additional buildings
						195,887 25 May 1951	Rehabilitation of additional buildings
951	19 Oct 1951	1,533,975.00	Butler & Cobbs Montgomery, Ala	197	-	-	-

IZONA							
Fort Huachuca	Construction - Original Rehabilitation of all Facilities	23 Jan 1951	26 Jan 1951	21	1	1	31
LIFORNIA							
Benicia Arsenal	Construction of 2- 200' x 1200' Warehouses	19 Dec 1950	29 Jun 1951	10	5	5	30
Riverbank Ordnance Plant	Rehabilitation of Facilities	4 Jun 1951	19 Dec 1951	82	1	1	29
NSAS							
Sunflower Ordnance Works	Construction and Equipment of One 40 Ton Pilot Unit for the Production of Weak Nitric Acid by the Improved Wisconsin Process	4 Jun 1951	30 May 1951	-	1	1	29
TUCKY							
Lexington Signal Depot	Signal Maintenance and Repair Shop	10 Jan 1951	11 Jun 1951	18	10	4	29
ISIANA							
Michaud Ordnance Plant	Construction Contract-Engine Test Cell Building, Pump House, Cooling Tower, Fuel Oil Storage and Supporting Facilities	7 May 1951	21 Jun 1951	-	1	1	27
RYLAND							
Camp Ritchie	Rock Excavation in Connection With Communications Facilities	20 Jun 1951	18 Jan 1951	10	11	7	19
Camp Ritchie	New Construction and Rehabilitation of Existing Buildings	20 Jun 1950	16 Aug 1951	30	20	6	22

31 Jan 1951	5 May 1951	2,701,820.77	M. M. Sundt Construction Co. Tucson, Ariz	75	-	813,017.11 14 Jun 1951	Additional rehabilitation
						642,867.58 15 Aug 1951	Additional rehabilitation
						334,862.14 12 Aug 1951	Additional rehabilitation
30 Jun 1951	19 Sep 51 (Plans and specifications for definitive contract representing a major portion of work, were completed on 30 Jun 1950)	5,560,813.50	M & K Corp., Stolte Inc., Fred J. Early Co. Inc., Oakland, Calif	280	-	-	-
29 Jun 1951	28 Sep 1951	2,795,467.00	Bechtel Corp. San Francisco, Calif	437	-	-	-
29 Jun 1951	Yes	2,200,000.00	Food Machinery and Chemical Corp. San Jose, Calif	540	-	-	-
29 Jun 1951	Yes	1,157,400.00	Struck Construction Co., Louisville, Ky	350	-	-	-
27 Jun 1951	1 Sep 1951	2,270,844.00	R. P. Farnsworth & Co. New Orleans, La	247	-	-	-
19 Jan 1951	Yes	6,910,900.00	S. A. Healey Co. White Plains, N Y	270	$10,000	927,751 29 Aug 1951	Rock Excavation for ventilating shafts
						244,010 2 May 1951	Tunnelling soft rock in lieu of open excavation
						154,880 31 Jan 1952	Tunnelling more difficult type of rock
22 Aug 1951	7 Sep 1951	9,160,600.00	John McShain, Inc. Arlington, Va.	252	1,000	-	-

96640 O - 52 - pt. 3 (Face p. [illegible])

a	Construction - Original Rehabilitation of all Facilities	23 Jan 1951	26 Jan 1951	21	1	1	31 Jan 1951
nal	Construction of 2- 200' x 1200' Warehouses	19 Dec 1950	29 Jun 1951	10	5	5	30 Jun 1951
rd-	Rehabilitation of Facilities	4 Jun 1951	19 Dec 1951	82	1	1	29 Jun 1951
rd-	Construction and Equipment of One 40 Ton Pilot Unit for the Production of Weak Nitric Acid by the Improved Wisconsin Process	4 Jun 1951	30 May 1951	-	1	1	29 Jun 1951
ig-	Signal Maintenance and Repair Shop	10 Jan 1951	11 Jun 1951	18	10	4	29 Jun 1951
-	Construction Contract- Engine Test Cell Building, Pump House, Cooling Tower, Fuel Oil Storage and Supporting Facilities	7 May 1951	21 Jun 1951	-	1	1	27 Jun 1951
e	Rock Excavation in Connection With Communications Facilities	20 Jun 1951	18 Jan 1951	10	11	7	19 Jan 1951
	New Construction and Rehabilitation of Existing Buildings	20 Jun 1950	16 Aug 1951	30	20	6	22 Aug 1951

951	5 May 1951	2,701,820.77	M. M. Sundt Construction Co. Tucson, Ariz	75	-	813,017.11 14 Jun 1951	Additional rehabilitation
						642,867.58 15 Aug 1951	Additional rehabilitation
						334,862.14 12 Aug 1951	Additional rehabilitation
951	19 Sep 51 (Plans and specifications for definitive contract representing a major portion of work, were completed on 30 Jun 1950)	5,560,813.50	M & K Corp., Stolte Inc., Fred J. Early Co. Inc., Oakland, Calif	280	-	-	-
951	28 Sep 1951	2,795,467.00	Bechtel Corp. San Francisco, Calif	437	-	-	-
951	Yes	2,200,000.00	Food Machinery and Chemical Corp. San Jose, Calif	540	-	-	-
951	Yes	1,157,400.00	Struck Construction Co., Louisville, Ky	350	-	-	-
951	1 Sep 1951	2,270,844.00	R. P. Farnsworth & Co. New Orleans, La	247	-	-	-
51	Yes	6,910,900.00	S. A. Healey Co. White Plains, N Y	270	$10,000	927,751 29 Aug 1951	Rock Excavation for ventilating shafts
						244,010 2 May 1951	Tunnelling soft rock in lieu of open excavation
						154,880 31 Jan 1952	Tunnelling more difficult type of rock
51	7 Sep 1951	9,160,600.00	John McShain, Inc. Arlington, Va.	252	1,000	-	-

ormat #3 Cont'd

Installation Name	2. Brief description Of work	3. Date of Design Authorization By Using Service or OCE (Day, Month, Year)	4. Date Negotiations Started With First Contractor (Day, Month, Year)	5. No. of Days Allowed Contractors to Submit Proposals	6. No. of Contractors Considered	7. No. of Proposals Received	8. Origin Date O Award Letter Others (Day, Mo
CHIGAN							
Detroit Arsenal	Laboratory and Engineering Building	29 Dec 1950	8 Feb 1951	6	9	7	15 F
IO							
Rossford Ordnance Depot	Design and Construction of Ordnance Maintenance Shop with Hardstand	20 Dec 1950	26 Mar 1951	11	4	4	6 A
NNSYLVANIA							
General Steel Castings Ordnance Plant	Construction of 3 Furnaces and Building, and Betatron Building	16 Feb 1951	27 Apr 1951	18	6	6	4 M
XAS							
Lone Star Ordnance Plant	Construction of Rehabilitation of Component Areas J, K, M, P and R; Administration Area 1; and Load Line Areas B,C,E, F and G	6 Dec 1950	2 Apr 1951	-	5	-	2 A
AH							
Dugway Proving Ground	Construction of Area "B" Buildings and Utilities	12 Apr 1950	15 Mar 1951	6	6	4	15 M
RGINIA							
Ft Belvoir	Extension of Engineer School	15 Dec 1950	7 Jun 1951	19	10	6	29 J
Army Transmitting Station	Construction of Facilities	24 Jan 1950	1 Feb 1951	20	7	6	16 M

8. Original Date Of Award By Letter Or Otherwise, (Day, Month, Year)	9. Were Plans & Specifications Fully Completed on Date of Award (Col. 8)? If Not, Date Completed (Day, Month, Year)	10. Amt. of Original Contract	11. Name & Address of Contractor (Name, City, State)	12. No. of Days Allowed For Completion of Original Contract	13. Liquidated Damage Per Day, If Any Stipulated In Contract	14. Amt & Date of Each Increase of $100,000 or More Over Original Contract. Amt. through Change Orders, Addenda, Supplemental Agreements Etc.	15. Brief description Of Work Embodied In Such Increase
15 Feb 1951	5 Apr 1951	$ 1,208,683.00	F. H. Taylor Co. Detroit, Mich	134	-	-	-
6 Apr 1951	Yes	1,555,600.00	The A. Bentley & Sons Co. Toledo, Ohio	245	-	-	-
4 May 1951	Yes	2,036,500.00	Irwin & Leighton Philadelphia, Penna	215	-	347,968 4 Aug 1951	Additional Facilities
2 Apr 1951	21 May 1951	1,272,246.15	J. M. Brown Construction Co. Inc, Shreveport, La	227	-	124,770.46 2 Jul 1951	Rehabilitation and conversion of barracks to apartments
15 Mar 1951	Yes	2,541,000.00	Jacobsen Construction Co. Salt Lake City, Utah	350	-	-	-
29 Jun 1951	Yes	1,580,097.00	Skinker & Garrett Washington, D C	360	-	-	-
16 Mar 1951	Yes	1,061,500.00	F. H. Martell Co., Inc. Washington 6, D C	240	-	-	-

Sunflower Ordnance Plant, Lawrence, Kans.

A CPFF contract at the Sunflower ordnance plant, mainly for rehabilitation work, was awarded January 2, 1951, at an estimated cost of $3,647,950. This was increased by an $8,000,000 supplement 2 months later which expanded the original capacity in terms of powder production by about 40 percent. Both the original completion date (May 1, 1951) and the original estimate were completely unrealistic. The first phase had not been completed at the time of the staff visit on September 14, 1951, and the completion date for the second phase was extended to March 2, 1952. The original estimate, prepared by Ordnance, was not checked by the corps. The latest estimated cost was given as approximately $25,000,000.

Due to the failure of the using agency to define the scope originally and reach a firm decision as to the needs as well as to later changes, it was difficult for the construction service to plan ahead and to administer the contracts adequately. Work on this project was on a 54-hour-week basis, and labor costs in the first phase alone were reported as totaling approximately $9,660,000, of which approximately $3,700,000 was overtime. This project showed evidence of excessive overhead costs, the overpurchase of materials and poor labor productivity. A considerable amount of loafing by laborers was observed.

Report of Inspector General on Management of Project

Mr. Donnelly. Mr. Chairman, it is my information at this time that this project was investigated by the Inspector General of the Army, and that he furnished a report which reflected considerably upon the management of this project by the people in the Corps of Engineers who are responsible for the management of these construction operations.

I have here an excerpt from the Inspector General's report identified as "Tab E", which points out apparent deficiencies, and I ask that this document be inserted in the record at this point.

(The document referred to is as follows:)

Tab E

Inspection Service on Rehabilitation CPFF Contract

1. Inspection and supervision by the Kansas City district engineer's representatives of the rehabilitation contractor's performance was not considered adequate to protect the interests of the Government.

2. The rehabilitation contractor was a group of firms called Massman, Patti, Tanner, and Mitchell, working in a joint venture. Their AEC contract was negotiated with the Kansas City engineer district at an estimated cost of $3,647,000, with a fixed fee of $96,000 for partial rehabilitation of the SUN. At the time of this inspection, the contract was being revised upward to $19,000,000 for a program of complete rehabilitation. Approximately 2,600 men on one shift were currently employed in widely separated areas.

3. The resident representative of the district engineer on the project was Mr. Ralph Horne, resident engineer, and two office assistants. Two additional supervisors from the district engineer's office devote part of their time to the project. This force was able to perform only infrequent spot-check inspections.

4. The firm of Tanner and Mitchell as the architect and engineer party in the joint venture contract had inspectional functions. However, as participants in this contract, their inspections were subject to bias.

5. During the course of the inspection it was noted at the river intake plant and the acid plant that there were excessive contractor personnel for the work which they were observed performing. Similar conditions were previously observed by installation personnel as indicated in the report to the commanding officer attached hereto as enclosure No. 1.

6. In consideration of the large sums involved in the contract, the large number of employees working in widely separated areas, and the observed conditions noted above, increased inspectional service by representatives of the district engineer is considered warranted.

7. It is recommended that the district engineer, Kansas City engineer district, increase the inspection and supervision of the work of the rehabilitation contractor to safeguard the interest of the Government.

Mr. DONNELLY. The next document which I offer for the record is enclosure No. 1 to the Tab–E portion of the Army Inspector General, and I ask this document be inserted in the record at this point.

Mr. RILEY. Without objection, it will be inserted in the record at this point.

(The document referred to is as follows:)

EXTRACT FROM A REPORT BY GEORGE E. O'HARA, INDUSTRIAL ENGINEER TO LT. COL. WALTER D. ROGERS, COMMANDING OFFICER, SUNFLOWER ORDNANCE WORKS, DATED MARCH 7, 1951

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3. (*b*) On the exterior of building 4012, there was a mobile welder in the process of welding a small piece of angle iron. In this process, there were 11 assistants, or on-lookers.

* * * * * * *

6. *River intake.*—The condition at the river intake continues to be as deplorable as it was when it was previously discussed. Bearing out previous discussions, inspection revealed that among approximately 40 millwrights and laborers, there were 3 in actual constructive performance of their duties. An inspection in the pit was probably the most astounding operation that could be witnessed. There were four men on the lower level dipping water into a pail. The pail was then emptied into a 25-gallon garbage can some 10 feet away. When the garbage can was filled (approximately 200 pounds), it was raised by ropes through the handles by the overhead crane to the top level of the pit. At the top level, there were 10 men and when the garbage can reached the top, 2 or 3 of the men would dip the water, two or three pailfuls at a time, into another garbage can and carry it to the ground level for disposal. This entire operation required 14 men approximately 1 hour to dispose of 25 gallons of water. During the operation, there was considerable horseplay among the men which, of course, did not tend to expedite the removal of the water.

* * * * * * *

CORRECTIVE ACTION BY CORPS OF ENGINEERS

Mr. DONNELLY. Now, Mr. Chairman, with respect to corrective action taken by the Corps of Engineers, I have here a memorandum dated May 18, 1951, from the district engineer of the Kansas City district, whose responsibility it was to manage or supervise the management of this contract, through the division engineer to the Chief of Engineers in Washington, and I ask that this be inserted in the record at this point.

Mr. RILEY. Without objection it will be inserted in the record.

(The document referred to is as follows:)

[Second endorsement]

Subject: Special Inspection of the Sunflower Ordnance Works, Lawrence, Kans. (April 18, 1951).

KANSAS CITY DISTRICT, CORPS OF ENGINEERS,
Kansas City 8, Mo., May 18, 1951.

Through: Division engineer, Missouri River division, Corps of Engineers, Omaha 1, Nebr.

To: Chief of Engineers, Department of the Army, Washington 25, D. C.

1. Reference is made to the recommendation in the basic letter that additional supervision and inspection of the work of the rehabilitation contractor be provided. Subsequent to the special inspection by Colonel Keller, the following steps have been taken:

(*a*) The construction engineer whose regular assignment is chief of the construction division in this district has been assigned to this project as project engineer on a full-time basis for the period required to assure early completion of critical operations.

(*b*) One full-time field engineer in addition to the new project engineer, and two full-time clerks have been added to the inspection forces.

2. In addition to the supervision and inspection provided by the project engineer and his own staff, it is pertinent to note that additional supervision, assistance, and inspection are being provided on this project:

(*a*) Inspection by the forces of the architect-engineer (about 55 inspectors).

(*b*) Spot time checking by representatives of the Army Audit Agency, as required by existing regulations.

(*c*) Assistance in security and safety matters and assistance in obtaining materials by the Ordnance Department.

(*d*) Assistance by the Hercules Powder Co., the operator of the facility.

(*e*) Close supervision by the district engineer and his key staff members (which is facilitated by the fact that the project is located approximately 30 miles from the main office of the district engineer).

(*f*) Inspection by staff members of the division office.

3. The difficulties which have been encountered in obtaining maximum worker efficiency on this project have been aggravated by the necessity for expediting this project to the utmost in view of its urgency. The delays experienced in obtaining necessary equipment, materials, and supplies have contributed to this problem. In addition, the fact that application of customary local overtime practices in the area has not been permitted in all cases has tended to lower employee morale.

4. Despite these problems, I shall continue to exert every means at my disposal to obtain maximum worker efficiency on the project. Additional personnel are being added to the staff of the project engineer on the site, and more will be added, as may prove necessary from time to time to insure full protection to the interests of the United States. Under existing instructions, however, completion of the work at the earliest possible date must have overriding priority.

L. J. Lincoln,
Colonel, Corps of Engineers, District Engineer.

FACTORS IN REHABILITATION AND REACTIVATION OF FACILITY

Mr. Donnelly. Mr. Chairman, I have here a memorandum signed, by Brig. Gen. Merle H. Davis, Chief of the Ammunition Branch, Industrial Division of Army Ordnance. This is the only copy of this that I have. It does give a background of the scope and nature of the project and the urgency feature. Would you want me to read this?

Mr. Riley. I think it would be well.

Mr. Donnelly. This memorandum is dated May 6, 1952, and the subject thereof is Factors in the Rehabilitation and Reactivation of the Sunflower Ordnance Works.

1. Sunflower ordnance works was constructed in the late part of World War II specifically for the production of solventless rocket powder. The demand for the plant coincided with the development and improvement of rockets as an ammunition type. The first area started operations in April 1943 and successive elements and lines, approximately a dozen in all, were brought into operation one after another until the spring of 1945. The total cost of the plant was approximately $183,000,000. It could not be replaced today for twice that figure.

2. Its entire output to date has been in solventless rocket powder of two different types but both for Navy rockets. These are aircraft rockets used by both Navy Air and United States Air Force. The current production contracts on the books at Sunflower for rocket powder which have been placed, total approximately $66,000,000 of which substantially half has been delivered to date. The solventless rocket powders do not closely resemble any other type of propellant made in production in this country and many calculated chances had to be taken in the design and equipment of the plant originally.

3. Recently, the demand for a specialized type of propellant for artillery ammunition, not previously made in mass output in this country, is demanded by requirements. Sunflower was the logical place to put this particular type of powder with such conversion of existing facilities as was necessary.

4. Neither the type nor the amount of work which had to be performed by the Corps of Engineers could be defined in detail in advance by Ordnance. The extent of deterioration and corrosion could not be ascertained before work was in actual progress. The rehabilitation process itself unfolds conditions of piping, valves, and equipment as well as the effect of past operations on the buildings themselves. Furthermore, the steadily increasing requirements with ammunition consumption in Korea has necessitated a series of increases in the scope of work to be performed. Ordnance did not consider that it was justified in rehabilitating more of the plant than that which could be justified by firm ammunition production requirements covered by appropriations from the Congress.

5. Ordnance appreciates the difficulties which the Corps of Engineers have had with labor costs on this project, due largely to characteristics of the Kansas City labor market.

6. Herewith in chronological order is a list of the requests submitted by Ordnance for expediting production funds to support the progressive reactivation of this plant. The work already completed and requested will still bring Sunflower to less than 60 percent complete reactivation. It is a very large plant.

August 21, 1950: Requested $3,223,600 for partial rehabilitation and reactiviation for production of rocket powder. Requirements available to Ordnance at this time were for 2,000,000 lb/mo rocket powder and minor amounts of other powder.

November 28, 1950: Requested $1,972,400 for deficit in original estimate of $3,223,600, and to provide for increased requirements of rocket powder from 2,000,000 to 3,750,000 lb/mo. (Budget estimates in second supplemental appropriation act provided funds in amount of $17,662,000 for further rehabilitation of Sunflower.)

August 8, 1951: Requested $1,997,560 for increased scope required for increased schedules for rocket powder.

October 23, 1951: Requested $308,638 for repair flood damages.

November 16, 1951: Requested $2,566,362 to cover overruns in cost of rehabilitation and increased scope due to additional requirements for rocket powder.

December 19, 1951: Requested $349,939 for facilities for reblending .30 and .50 caliber powder, for which capacity was immediately required.

March 14, 1952: Requested interim allotment of $10,000,000 for an estimate $16,752,400 project covering facilities to produce 3,600,000 pounds of nitroguanidine power/months and increased capacity for two types of rocket powder.

Total funds allocated, $38,080,499.

Assigned to OCE	$34, 489, 939
Assigned to CO	3, 590, 560
Total	38, 080, 499

SUPPLEMENTAL INFORMATION

It is further pointed out that the Sunflower reactivation and rehabilitation started out with small order activity and with the impact of the Korean emergency and the critical shortage in rocket powder both the character of the rehabilitation and reactivation on work and the estimates thereon of necessity were constantly subject to change. It is pointed out that in a solventless powder plant of this type the rehabilitation unfolds the deterioration and corrosion and of itself changes the reactivation requirements. It is impossible in a plant of this type to make surveys and engineering estimates which are entirely sound in every regard.

Mr. Chairman, that concludes the chain of documents. I think the members would like to ask some questions.

Mr. RILEY. General, do you have any further information or comments you would care to make on this work at the Sunflower ordnance plant?

General HARDIN. I beg your pardon, sir?

Mr. RILEY. Do you have any further comments or explanation with regard to the matters which have been brought to the attention of the committee on this construction or rehabilitation and additions to the Sunflower ordnance plant?

General HARDIN. The chain of correspondence presents the picture so far as the Corps of Engineers is concerned with regard to the need

for better production on the part of the people employed on this job. The development of the project as outlined by General Davis is almost typical of many of these emergency undertakings which we have developed and endeavored to complete for the using services in time of emergency. It is a piecemeal undertaking, which results from lack of knowledge of how much is ultimately required, or funding problems, or what not. It creates a difficult construction operation.

We have no comment to make, except to say we feel it is inherent in the kind of situation which this Nation encountered.

INCREASED SCOPE OF WORK AFTER INITIATION OF CONSTRUCTION

Mr. RILEY. Was the scope of this work at Sunflower increased after you started the project?

General HARDIN. Many times.

Mr. RILEY. Many times?

General HARDIN. Yes, sir.

Mr. RILEY. Who was responsible for the decision to increase it?

General HARDIN. The Ordnance, as the using service.

Mr. RILEY. Would it be a fair conclusion to say that probably the Engineers did not increase their engineering personnel and inspectors sufficiently to give it adequate supervision?

General HARDIN. Well, the only complaint that we have any indication of was that which stemmed from the report and the resulting inspection by the Inspector General back in April 1951. As a matter of fact, the project was subject to many increases after that. This complaint about the improper utilization of personnel, I believe, came rather early in the life of the undertaking. I have no indication that the supervision of the project as it developed was not adequate.

IMPROVEMENT IN MANPOWER UTILIZATION ON PROJECT

Mr. RILEY. Do you have any indication that the utilization of the manpower on the job was better later on in the construction period? Were steps taken to rectify that situation?

General HARDIN. Well, sir, I think it is fair to say that the district and division engineers were able to put this project on an effective operating basis. There are growing pains in most of these things which are hurriedly conceived and put together. The most critical time on these jobs is the getting-started period, when you have to accumulate the men who have never worked together, and build a team out of them. In the early stage everything is progress. Otherwise we would not be undertaking these jobs on a cost-plus-fixed-fee basis.

DISADVANTAGES AND DEFICIENCIES IN COST-PLUS-FIXED-FEE CONTRACTS

The urgency of the thing carries with it as a general rule certain inefficiencies. I think it is only fair to say that the cost-plus-fixed-fee operations, as I have stated so many times before, are only things which are resorted to when there is no better way of accomplishing the result.

I know that private industry uses a cost-plus-fixed-fee procedure in getting work done. Big industry uses that type of an operation

quite frequently. But they do not have to resort to the kinds of checks and balances and detailed administrative procedures which we in the Government service have to utilize in executing and administering one of these cost-plus-fixed-fee operations.

I think it is also fair to state that the cost-plus-fixed-fee operation, so far as the Government undertaking is concerned, has had a bad name ever since World War I, when it was conceived. It started out on a cost-plus basis, and everybody who had any reason to voice criticism poured it on that type of governmental activity. It was then changed to a cost-plus-fixed-fee contract. But in no part of the country, in our experience, do we have the success in administering a cost-plus-fixed-fee contract that we ordinarily have with a competitive type of operation.

That is just not in keeping with the American way of doing things. I guess that is the best way to explain it. Anyone who is disgruntled or who sees a piece of wood being burned on the job immediately says to his neighbor or to the newspaper: "Here is the Government wasting money again."

We have had one continual problem of the administration of cost-plus-fixed-fee contracts, in my experience, which begins with World War II and goes through to the present time. There is no question but what it is a very difficult form of contract to administer, particularly when you are seeking a high degree of performance.

We are concerned with that because there is no criticism which is brought upon the Corps of Engineers which is as serious as that which comes from our efforts to administer cost-plus-fixed-fee contracts. I think you can run through your own memory, with this present effort, and almost every instance of severe criticism which comes is from the inability, if you will, to execute a contract which is of this type.

We are trying to find some better way of contracting for construction, which will be in keeping with the American way of doing things, which seems to demand some sort of an incentive spirit. While we get the best contractors there are in America to undertake these cost-plus-fixed-fee operations, they do not like them and we do not like them. It is only because we have no better way of accomplishing some of these urgent things that we have to resort to their use.

We are thinking that maybe some kind of a sliding scale, where if they do the job for less they will get more fee, may have merit in it. But we do not have the answer to the problem.

INADEQUACY OF EQUIPMENT

Mr. RILEY. From the information which the investigating staff is furnishing here there is an indication that the contractors had inadequate equipment to even do the original job, if the incident of transporting 25 gallons of water prevailed throughout.

General HARDIN. Well, I know this construction firm is a very fine construction firm. If they were habitually resorting to that sort of construction procedure, I just cannot understand it. I have been associated with several of these firms over many, many years and they are some of the finest contractors which you can find. I have no explanation for that report.

INSPECTION BY CONTRACTING AND ENGINEERING FIRM

Mr. RILEY. What about the fact that a part of the contracting and engineering firm was also handling the inspection of the functions? Is that not out of the ordinary procedure?

General HARDIN. May I ask you, Mr. Chairman, where you find that paragraph?

Mr. RILEY. That is item No. 4 on the criticism dated April 13, 1951.

General HARDIN. No, sir. That is not out of keeping with this kind of a contract.

This rehabilitation job required not only engineering capacity but also construction and management capacity. This contract was of that form which we call the AECM, which means an architect-engineer construction management type of contract. We have used this type of operation quite frequently in the rehabilitation of these highly technical ordnance plants where the contractor has to have all of these talents. He goes into the job, analyzes the problem, takes the machinery and piping and other power-plant facilities apart, and at the time he is doing that he has to prepare plans and specifications for their rehabilitation, using to a large degree the subcontracting procedures either on a negotiated or a bid basis. Therefore, this is a combined operation of architect-engineer services, construction services, and management. The management comes into the picture in managing the accomplishments of the subcontractors.

Mr. RILEY. I can readily understand that, but I am somewhat disturbed over the fact that the statement is made that they also controlled the inspectors. It would seem to me that the inspectors should have been under the Army engineers and should have had both the interest of the Government and the interest of the contractor in mind.

General HARDIN. Well, Mr. Chairman, the architect-engineer services are of two types. We have used them very widely in this emergency. I think the Navy has done the same thing.

Type 1 is the purely engineering design; preparation of specifications and preparing the bid documents. That work is done under the supervision and general checking of the Corps of Engineers.

But then phase 2 is the second part of the architect-engineer services. This is the furnishing of qualified inspectors and inspecting the work. Again, of course, it is under the general supervision of the Corps of Engineers personnel, but the utilization of the architect-engineers in that fashion is in keeping with the standard procedures which you will find in civilian practice, where a firm engages an architect-engineer not only to design but also to supervise the construction of an undertaking.

In this period of emergency, as I pointed out in my comments this morning, we have had to resort to this type of procedure on account of what we think is a lack of wisdom of trying to build up the Government forces to an inordinate degree. We would only get those people by taking them away from the established civilian concerns. That would create problems which we do not think would be to the advantage of the Government. Therefore, we are endeavoring to keep our organization down to a rather modest level and to use that organization for directing, planning, and supervising the activities which we engage by contract.

Mr. RILEY. Do you not think, though, that you would get a better job if you had more adequate supervision by the Office of the Chief of Engineers?

General HARDIN. We would like to be able to inspect all of our work, but, as I say, we think it is just too big a task to try to do in an emergency, when you would immediately have to reduce your organization. People are not prone to seek employment which is only of short duration. Through our civil-service procedures and the scale of wages that you have to pay, you cannot compete with industry or the architect-engineer construction industry for short-time employment unless there is a surplus of that type of talent. Frequently you will find in periods which are bordering on unemployment that there is no problem of recruiting people for temporary employment in the Government service. But there is that element in the Government service that men desire and are willing to take somewhat lower pay scales to get, and that is the security and an uninterrupted period of employment which is generally associated with Government activities.

AVAILABILITY OF RESERVE ENGINEER OFFICERS

Mr. RILEY. Do you have any of the Reserve officers graduated from the ROTC in mechanical and electrical engineering and civil engineering assigned to you for work?

General HARDIN. Yes, sir.

Mr. RILEY. As inspectors and assistants?

General HARDIN. Not for inspectors.

Mr. RILEY. Well, they could be utilized as assistants.

General HARDIN. Those men are all in combat. They are in Korea. They are with our troop units. There has been a great effort made to keep them up to required strength. The inability to get sufficient numbers has led us to the creation of officer candidate schools where we are now commissioning men at the rate of about 35 a week down at Fort Belvoir, men taken out of the enlisted grades and sent to a 22-week course of intensive training. There just are not enough officers to go round.

Mr. RILEY. Is it the policy of the Army to take these engineering graduates and put them into the Engineer Corps or do they put them into the combat units and utilize them as combat officers, and thus waste, to a certain extent at least, this fine technical training which they have had?

General HARDIN. Well, sir, the greatest need, of course, has been for combat. That has been the first priority. There have been no junior officers available for assignment to this construction work. We have had of necessity to depend upon a utilization of our civilians to the greatest possible degree.

Mr. RILEY. Do you not think it is rather a waste of training to put a man, for instance, in as an infantry lieutenant when he has had engineering training?

General HARDIN. Well, from a selfish point of view, Mr. Chairman, of course that can be said, but I do not believe that it can be said in all fairness, because the man who is an engineer may have many other qualities of leadership and intelligence quotient which fit him primarily for a job of leadership. The infantryman has to be led.

Mr. RILEY. There is no question about that, but you have to have these other installations and facilities, also. I am asking these ques-

tions to try to satisfy myself that the trained personnel are being taken into the Army and being utilized to the utmost of their capacity and training. I certainly have a very serious doubt at the present time.

General HARDIN. Anticipating that there were many questions which you would like answered which I am certainly not really competent to answer about this personnel, I have asked General Seybold to hold himself in readiness to come at 10 o'clock tomorrow morning, if that is convenient with you.

Mr. RILEY. That would be fine. Mr. Furcolo?

DISCUSSION OF PRACTICE OF NOT CHECKING ESTIMATES

Mr. FURCOLO. One of these documents refers to the fact that the original estimate for the Sunflower Ordnance Plant prepared by Ordnance was not checked by the corps. I would be interested in knowing whether that is the usual practice.

General HARDIN. No, sir; but it was not infrequent in this early stage. We were called upon by Ordnance to do things in this period of early 1951 and the latter part of 1950, after Korea, where time was of the essence, and we had to save days and weeks rather than months. We frequently made contracts for Ordnance where we took the figures which they had prepared. They had been studying the problem with their field service, and had rather definite ideas about what it would cost to put the plants they were intimately connected with into usable condition.

I think that their estimates, outside of them being production people generally rather than construction, were quite realistic.

Mr. Cary is our expert on industrial facilities, and I would like for him to elaborate a little on that subject.

Mr. CAREY. Well, at the present time the estimates are made up jointly by Ordnance and the district engineer. Then they are submitted to the Chief of Engineers for review. Then they go to Ordnance for submittal to higher authority for approval of the project. So this condition which happened back in late 1950 could not happen now under the present policy.

Mr. FURCOLO. I can understand and appreciate the need for haste back at that time, and I realize that certain things had to be done, and some things had to be eliminated, because of the great desire and need for haste, but I was wondering about this: Even if it might take an extremely long time to prepare the original estimate, I would assume that once all that work had been done it would not take too much time to perhaps run through it very rapidly for a quick opinion as to the completion date and the cost of the work that they had planned, and things of that nature. Am I wrong in that assumption? I am frank to admit that I know very little about this, but I do see a great difference in having to prepare anything, or just having someone who is qualified look that over and say: "Well, that looks all right on the face of it."

General HARDIN. Do you want to try to answer that?

Mr. CAREY. I think that is correct. But at the time that this project was initiated I do not think that Ordnance at the time knew exactly the scope of the work or the requirements. Because of an emergency it was necessary to increase production, but the extent that some of these plants had to be rehabilitated I do not think they knew until they started to get into the project.

Mr. FURCOLO. Well, I understood that they had prepared something—whatever that might have been—which was to be ready by May 1, 1951. Later on that was changed.

Now, directing my attention just to whatever it was they had prepared for the May 1, 1951, completion date, it seems to me that they must have had something prepared there which someone else could look over and check on.

Mr. CAREY. Well, there is no question about that. It could have been checked, but it would take time to check an estimate of that kind in detail. On some jobs it is necessary to go over each one of these items, because some of these plants have been inoperative for years. Until it is actually uncovered it is hard to tell what the conditions are.

Mr. FURCOLO. May I ask you this question: Do I understand that it was at least not a situation where the Engineers wanted to check but the Ordnance would not cooperate in letting you look over their plans?

General HARDIN. No.

Mr. FURCOLO. It was rather a situation where there just was not the time? It was not through any lack of cooperation between the Engineers and Ordnance?

General HARDIN. That is true exactly.

Mr. FURCOLO. Do I understand also that at least so far as future work is concerned as much as possible you are trying to check it as you go along?

General HARDIN. Yes.

Mr. FURCOLO. So if there had been any defect in the operation here, that at least, is not going to happen again if we can avoid it?

Mr. CAREY. For the present program they are first of all made up in the field by Ordnance and the district engineer. The estimates come into the Chief's office for review, and then they are forwarded to Ordnance and then to higher authority before the project is approved.

INEFFICIENT OPERATIONS ON CONSTRUCTION JOBS DUE TO ORGANIZATIONAL DIFFICULTIES

Mr. FURCOLO. It seems that running through all of these cases—not simply as concerns the Army or Ordnance or any one in particular—we seem to continually be confronted with a situation where the original estimates are not realistic, or the completion dates are not, or something else. While it may not be the fault of anyone, under the conditions under which they were working, it has cropped up so much that it seems we ought to be trying to do something to avoid it in the future.

Now, in paragraph 5 of one of these documents it is pointed out that—

> There were excessive contractor personnel for the work.

and then it goes on to point out in No. 7 that—

> It is recommended that the inspection and supervision be increased.

I would just like to know in general your opinion as to whether or not ordinarily this committee would expect to find that there is a tendency on the part of contractors to have more people in the administrative

or manual capacity than there should be, and whether or not it would in the long run save the Government any money if the Engineers were given more personnel or money to carry on this supervision and inspection? I realize sometimes you can be overloaded with supervisors and inspectors. I am not asking you to suggest that, but I would like to get your comments on that.

General HARDIN. No, Mr. Furcolo. I think in retrospect the jobs I have been associated with which have been faulty are not due to any limitation on money. It is not due to any limitation on numbers of personnel. Most generally it is because you have to create a working organization where each member will know what is expected of him. You are employing people who are misfits. Until you find out that they are misfits they will frequently be troublemakers, either by loafing on the job, or they will be troublemakers in other respects. There is usually a shake-down period, as I mentioned a little earlier this afternoon, which is necessary in throwing a group of thousands of men together and trying to get effective operations out of them. Some of our jobs give more trouble than others, and you can only relate that trouble to such things as inadequate planning.

We have all been too prone to get started too soon, I think. The clamor is, in periods of stress like that, "Something has got to be showing."

I must admit that at times you would probably do better if you would do more planning and less working in the early stages of the thing. Yet the pressure you are under to let it be known you are working frequently leads to inefficient operations. You are accomplishing something, but maybe not as much as you might if you planned it better.

That applies to the contractors as well as to the Corps of Engineers. But I know of no instance where we were hampered by lack of money. The construction money is available to us, and we can use it either for construction or inspection.

As I say, if we find that it is not practical to inspect the work with our own forces, we have the great talents of the whole American architectural engineering profession available to us, because they were out of work and are now. We could hire 10 firms for every one we do hire. You will find better talents in engaging those people than you will by going out into the open market and trying to recruit people.

Mr. FURCOLO. Before asking any more questions, I certainly want to compliment you and tell you how much I appreciate the candor and fairness in your answer. Very often I think the experience of any congressional committee is—sometimes we ask for it, frankly—when we ask a witness a question such as I asked you, to have the answer come back: "Yes, we are short of personnel and money, but we can only do what we can with what the Congress gives us." I think your answer has been very fair and frank, and I appreciate it.

In other words, as I understand it, you would say that by and large there was not too great a degree of overloading of personnel on the part of the contractors?

General HARDIN. No; I would not say so.

Mr. FURCOLO. Would you say in general, as I think you touched on slightly in your answer, that on most of the jobs you had anything to do with there would not have been any great delay in the actual

completion date, rather than the estimated completion date, if a little more time had been taken in the beginning? Would you go that far?

General HARDIN. Well, with respect to certain operations in retrospect I would say that is true. On others, I think they were quite ably carried on from the outset. There are exceptions both ways. I can think of quite a number of highly effective operations which got off to a running start and never faltered.

Mr. FURCOLO. Then I want to ask you this question, also: I suppose you could go to any job or any plant or any office, private or public, and if you were looking for certain things to find in the nature of "horseplay" or "wasting time," those could be found by the casual observer.

In general, would you say that there was any excessive amount of loafing or "horseplay" on such jobs as compared with what would be happening on private jobs?

General HARDIN. No, sir; I would not. I have a pretty high regard for the American workman. He is not addicted to that sort of thing as a general rule. You will find individuals with high spirits and what not who will be inclined to fool around, or not put out a full day's work, however.

INEFFICIENCIES PREVALENT UNDER COST-PLUS-FIXED-FEE CONTRACTS

Generally it falls in the category of less effective effort on these cost-plus-fixed-fee operations simply because by the very nature of the beast they are not undertaken with the planning and the organization which you will find in a deliberate type of contracting where a man has had ample time to prepare his organization, and where he knows definitely what he is going to do. Now, when you have a firm contract with a man, he only accepts changes to that contract if you pay him something for it. He is not inclined to be changing his scope of work or his procedures, because it upsets the niceties of a balance in material and men and what not to make the job run smoothly, to be changing plans. That is the reason why you adopt one of these cost-plus-fixed-fee operations, because it is so subject to changing requirements of the Government. Otherwise you would bog down and never get another type of contract going.

Mr. FURCOLO. Would you say that on the average the contractor on a governmental job gets about as much work from the employees as the same contractor would get with those same employees on a private job?

General HARDIN. Well, now, you are speaking as between the cost-plus-fixed-fee operation and the bid type of operation?

Mr. FURCOLO. Whichever it may be. If you make it the same contractor and the same employees, that is what I am after.

General HARDIN. Yes, sir; definitely. I think it is identical. If it is a cost-type contract, whether it be for the Government or for private employment, I can see no factor which would favor United States Steel as against the United States Government. If it is a bid job, a man is out to make every dollar he can. It does not make any

difference whether he has it with the Government or with a private owner.

Mr. FURCOLO. That is all I have, Mr. Chairman.

Mr. RILEY. Mr. Davis?

Mr. DAVIS. There does not appear to be any new factor in the experience of the Army in connection with this particular project which has not been found to be present in other projects conducted by the other using agencies. We have been trying to find out just where the responsibility lies here. I do not know whether we have helped ourselves on this particular project or not. It seems to be very much along the same pattern we have been witnessing here; regardless of whether it was an Air Force project or a Navy project or an Army project. There does not seem to be much difference.

Off the record.

(Discussion off the record.)

(After discussion off the record.)

USE OF RATIO OF MANUAL TO NONMANUAL EMPLOYEES AS GUIDE FOR DETERMINING EFFICIENCY OF SUPERVISORY PERSONNEL

Mr. DONNELLY. Mr. Furcolo put his finger on the heart of this proposition of the management of the Sunflower contract.

We have here, prepared by the Corps of Engineers, a statement on the ratio of manual to nonmanual employees in this Sunflower plant, and also for various other plants. On the statement for the Sunflower plant, if you will look at the next to the last column you get the percentage of nonmanual employees to the total number of employees, and if you look down there you see that on May 31, 1951, it was 17.3 percent, on June 30, 1951, 22.2 percent, and on July 31, 29.3 percent so that they never did get in hand this question of the management of the people on this contract.

By way of contrast, if you look underneath to the other contracts for which the corps has furnished these ratios, we have the Hoosier Ordnance Plant, Indiana, and there, if you look in the last column that will give you the percentage of nonmanual to total employees, and you see how that situation was in hand.

Then looking at the next one, which is the Jefferson Proving Ground, in Indiana, again you see how that situation was gotten in hand.

Then looking at the next one, the Keesler Air Force Base in Mississippi, we find the situation again very much in hand. The committee will recall that Admiral Jelley testified here that this way of detecting the efficiency of the supervisory personnel, using this ratio, seemed to him a highly effective way to do it.

Mr. FURCOLO. He said it was better than any way that they were using.

Mr. DONNELLY. That is right.

May these ratios be put in the record at this point, Mr. Chairman?

Mr. RILEY. Without objection they may be incorporated in the record at this point.

(The matter referred to follows:)

Data Furnished by Corps of Engineers

Sunflower Ordnance Plant

Date	Nonmanual	Manual	Total	Percent nonmanual to total	LS contractors
Jan. 31, 1951	112	292	404	27.7	0
Feb. 28, 1951	172	1,322	1,494	11.5	0
Mar. 31, 1951	333	2,956	3,289	10.1	0
Apr. 30, 1951	463	3,096	3,560	13.0	236
May 31, 1951	465	2,226	2,691	17.3	243
June 30, 1951	431	1,508	1,939	22.2	267
July 31, 1951	381	919	1,300	29.3	339
Aug. 31, 1951	326	842	1,168	27.9	194

Up to June 30, 1951, the nonmanual included the inspectors.
All the nonmanual includes 3 shifts of guards and 3 shifts of fire patrol.

Contract No. DA–15–029–ENG–2121, Hoosier Ordnance Plant, Indiana, monthly average figures

	Number of nonmanual employees	Number of manual employees	Total number of employees	Percent nonmanual to manual	Percent nonmanual to total employees
1951—March	37	437	474	8.46	7.80
April	55	617	672	8.91	8.18
May	60	575	635	10.43	9.44
June	55	620	675	8.87	8.14
July	46	376	422	12.23	10.90
August	41	349	390	11.74	10.51
September	45	385	430	11.68	10.46
October	45	490	535	9.18	8.41
November	47	433	480	10.85	9.79
December	45	395	440	11.39	10.22
1952—January	42	233	275	18.02	15.27
February	35	140	175	25.00	20.00
March	32	128	160	25.00	20.00

Contract No. DA–15–029–ENG–2127, Jefferson Proving Ground, Ind., monthly average figures

	Number of nonmanual employees	Number of manual employees	Total number of employees	Percent nonmanual to manual	Percent nonmanual to total employees
1951—March	14	23	37	60.86	37.83
April	25	32	57	78.12	43.85
May	34	81	115	41.97	29.56
June	43	130	173	33.07	24.85
July	42	223	265	18.83	15.84
August	38	275	313	13.81	12.14
September	36	354	390	10.16	9.23
October	31	319	350	9.71	8.85
November	18	255	273	7.05	6.59
December	19	181	200	10.49	9.50
1952—January	16	259	275	6.17	5.81
February	10	190	200	5.26	5.00
March	9	191	200	4.71	4.50

DATA FURNISHED BY CORPS OF ENGINEERS—Continued

Contract No. DA–01–076–ENG–609, Keesler Air Force Base, Miss., monthly average figures

	Number of nonmanual employees	Number of manual employees	Total number of employees	Percent nonmanual to manual	Percent nonmanual to total employees
1950—October	13	44	57	29.54	22.80
November	35	97	132	36.08	26.51
December	48	113	161	42.47	29.81
1951—January	63	208	271	30.28	23.24
February	70	483	553	14.49	12.65
March	86	900	986	9.55	8.69
April	91	1,029	1,120	8.84	8.12
May	84	1,402	1,486	5.99	5.65
June	81	1,266	1,347	6.39	6.01
July	79	1,214	1,293	6.50	6.10
August	62	1,196	1,258	5.18	4.92
September	63	1,258	1,321	5.00	4.76
October	65	1,466	1,531	4.43	4.24
November	60	1,457	1,517	4.11	3.95
December	57	1,137	1,194	5.01	4.77
1952—January	50	792	842	6.31	5.93
February	28	345	373	8.11	7.50
March	24	237	261	10.12	9.19

Mr. DONNELLY. Now, to give the committee a further comparison between this Sunflower ordnance plant, here is one for the Nebraska ordnance plant, at Wahoo, Nebr. We have one here that shows that in the case of the Nebraska ordnance plant they have the thing under control much better than they had at the Sunflower plant.

May this be put in the record at this point, Mr. Chairman?

Mr. RILEY. Without objection, it may be incorporated in the record.

(The matter referred to is as follows:)

Contract No. DA–25–066–ENG–778, Nebraska ordnance plant, Wahoo, Nebr., monthly average figures

	Number of nonmanual employees	Number of manual employees	Total number employees	Percent nonmanual to manual	Percent nonmanual to total employees
1951—January	16	98	114	16.32	14.03
February	20	331	351	6.04	5.69
March	25	400	425	6.25	5.88
April	46	487	533	9.44	8.63
May	44	479	523	9.18	8.41
June	44	574	618	7.66	7.11
July	42	636	678	6.60	6.19
August	36	472	508	7.62	7.08
September	31	297	328	10.43	9.45
October	27	171	198	15.78	13.63
November	23	105	128	21.90	17.96
December	15	45	60	33.33	25.00
1952—January	14	111	125	12.61	11.20
February	13	100	113	13.00	11.50
March	13	98	111	13.26	11.71
April	12	102	114	11.76	10.52

Mr. DONNELLY. Then we find that on another cost-plus-fixed-fee job which the corps was doing at Offutt Air Force Base the percentage of nonmanual to total employees never got below 20.43 percent in some 16 months of operation. That is the only one of those that I have, Mr. Chairman. After the members have examined it, may that be put in the record?

Mr. RILEY. Without objection it may be incorporated in the record at this point.

(The matter referred to is as follows:)

Contract No. DA-25-066-ENG-854, Offutt Air Force Base, Nebr., monthly average figures

	Number of nonmanual employees	Number of manual employees	Total number of employees	Percent of nonmanual to manual	Percent of nonmanual to total employees
1951—February	2	0	2	----------	100.00
March	7	5	12	140.00	58.33
April	28	16	44	175.00	63.63
May	22	53	75	41.51	29.33
June	27	84	111	32.14	24.32
July	29	80	109	36.25	26.60
August	35	128	163	27.34	21.47
September	38	148	186	25.67	20.43
October	40	149	189	26.84	21.16
November	37	135	172	27.40	21.51
December	36	102	138	35.29	26.08
1952—January	33	74	107	44.59	30.84
February	25	30	55	83.33	45.45
March	14	3	17	466.66	82.35
April	10	4	14	250.00	71.42

NOTE.—No salary reimbursed for contractor principals.

Mr. DONNELLY. General Hardin, would you care to comment on the approach to this question of the control of the administrative and supervisory personnel on CPFF contracts by using this type of ratio?

General HARDIN. I think it is a very ingenious ratio, Mr. Donnelly, and I think that it is quite an effective and quick check on a job. I believe that you will have to appreciate, of course, that in the beginning and in the end of a job the ratio of nonmanuals to manuals should be high.

Mr. DONNELLY. Exactly.

General HARDIN. Because you are beginning to get under way, and if you do the job right you should have your administrative procedures set up so that your property accountability and your auditing, and your fiscal and your personnel and all of those things are organized and functioning before you begin to bring workmen in to go to work. That is not always possible, however. Where it is, I would say it is highly desirable, and then at the tail end of the job, necessarily, you are cleaning up administrative records and what not, and they should be high again.

OVERPURCHASE OF CONSTRUCTION MATERIALS

Mr. DONNELLY. Now, further on this CPFF subject matter, we have here a case at the same place, the Sunflower ordnance plant, of overpurchases of construction materials, which meant that materials in scarce supply were withdrawn from the civilian market through lack of planning and efficient procurement on the part of the corps

and the contractor. May this be inserted in the record at this point, Mr. Chairman?

Mr. RILEY. Without objection, it may be inserted, in the record.

(The matter referred to is as follows:)

OVERPURCHASES OF CONSTRUCTION MATERIALS

The purchase of construction materials substantially beyond contract needs was observed at two of the CPFF projects visited. At the Sunflower ordnance plant, the prime contractor (Massman-Patti, Tanner & Mitchell) and the two CPFF subcontractors set up three separate purchasing and warehousing organizations. Purchasing was not coordinated with the result that there was a duplication of orders and overbuying. The present inventory of $2,100,000 of construction materials includes about $800,000 of surplus which will not be needed unless the capacity of the plant is increased beyond that now planned.

The removal of large amounts of construction materials from commercial markets during the present period of scarcities is indefensible. Moreover, it appears probable that this surplus will remain unused for some time unless present regulations are changed. Because the project is being financed with Ordnance funds, the surplus cannot be transferred to other construction projects without Ordnance approval. Ordnance has thus far refused to permit such material transfers to take place because its appropriations cannot be credited by an interproject transfer of funds. It now appears that this huge stock of building materials will be warehoused at the Sunflower plant for an indefinite period except for such items as are required there for plant maintenance work.

Mr. DONNELLY. Those procurements were made in 1951 and I understand that General Hardin had some comment to make on this subject matter.

General HARDIN. Our comments in that regard are these, that the above case is factual. We follow that here saying, however, as we see it that additional rehabilitation work estimated to cost $10,000,000 has been authorized by directive No. 1, Sunflower, with Symbol OW–52–P.P.–ORD, dated March 20, 1952. This directive includes No. 2 priority work in the second wave of rehabilitation for which most of the materials in question were purchased but not used due to subsequent deletion of those items from that original program.

No request was made to the commanding officer for permission to transfer materials as it was anticipated that all materials would be used on the Sunflower job. The presently authorized job will require practically all material now on inventory.

However, there is no purpose of my remarks in saying that the incident as reported here was not factual.

Mr. RILEY. General, did I understand you to say that you knew Massman-Patti, Tanner & Mitchell, that you knew them and knew their work?

General HARDIN. Yes, sir.

Mr. RILEY. Is it possible that they were overloaded with work and had to stretch themselves too thin, and was that the reason that they seemed to have considerable confusion and mismanagement on this particular project?

General HARDIN. I do not think that they were overextended, at least not to my knowledge. They were not in my Division. I would like to ask Mr. Carey if he knows.

Mr. CAREY. I do not know whether they were or not at the time.

Mr. RILEY. I am just wondering why a contract engineering firm who, apparently, from your knowledge of them, had a good reputation, should be subject to all of the criticism which has occurred on this job there.

General HARDIN. I have no over-all explanation for that, Mr. Chairman. I do not doubt but what there may be some logical explanation for the confusion that was apparent in the early stage of this job. Off the record here.

(Discussion off the record.)

Mr. RILEY. Are there any further questions?

Mr. DAVIS. Whose responsibility was it to coordinate the purchasing and guard against overpurchasing and the purchasing of products that would not be needed in a case like this?

General HARDIN. Well, there is no question but what the responsibility lies in the hands of the district engineer, who, in turn bosses the method of operating these jobs under the supervision of an area engineer. The concept of these operations is that it is a Corps of Engineers' undertaking. I am not endeavoring to shirk our responsibility. We marry, if you will, with the contractors to produce the end result that is required, but there is no question but what the responsibility, the chain of command, goes to the contracting officer, who is the district engineer.

In a case of this kind here you necessarily are engaging talents and they are performing the management function for you. They are subject to check. They cannot be allowed to go without supervision, and that is why we have a resident engineer or an area engineer and his staff to supervise the contract work, whether it be building whether it be procurement, or whether it be hiring, but in the final analysis if anything goes wrong the responsibility is with the contracting agency.

Mr. DAVIS. This gross overpurchasing was discovered by the Corps of Engineers when?

General HARDIN. I do not have that information.

Mr. DAVIS. Mr. Donnelly, when did the committee investigators report this situation to you?

Mr. DONNELLY. They reported it to me in late January of this year, and they found the situation sometime in August of last year.

Mr. DAVIS. Do you know whether or not the committee investigators called it to the attention of the Corps of Engineers in August, or was any such contract with the engineers delayed until their report was placed in your hands?

Mr. DONNELLY. I believe it was implicit that they advised the Corps of Engineers people in the field at the time they found it, because the committee investigators do not just walk in on a job and walk around it, but they contact the top level of the Corps of Engineers and anything they find, as a matter of fact, as we have found out, is soon learned by the Corps of Engineers at most levels, but the function and role of the committee staff is to report to the committee itself and not to any other agency.

Mr. DAVIS. I appreciate that. My questions were directed to this point, that somebody pretty badly missed the boat by saddling the Federal Government with about $800,000 worth of materials that were not used on that job, and we do not know when they are going to be effectively used. The question is directed to this point, as to whether the responsible people were just told you have done a good job and now go out and do another one, or did somebody have it officially called to his attention there that he had cost Uncle Sam some money that he should not have been cost?

General HARDIN. Mr. Davis, I pointed out in this case that while this overprocurement apparently was factual, that the materials have been put to work in the second wave of rehabilitation.

As I pointed out, there have been successive stages in this rehabilitation work, and it is not illogical that maybe the Government in the end saved money by buying materials in large quantities with the definite understanding that it was to be on a step-by-step development rather than piecemeal, and, as I pointed out, we do have a directive which was dated March 20, 1952, to initiate the second wave of rehabilitation of which my comment says:

> Most of the materials in question were purchased but not used originally due to the deletion of those items from that original program, but now they are picking those items up and proceeding with the rehabilitation work.

Just recently Sunflower was increased some $10,000,000.

Mr. DAVIS. That could happen only through rare good fortune that Uncle Sam would come out on the long end of it, could it not?

General HARDIN. Well, sir, I do not have any examples to give you where we have large stocks of material that were not used.

On the contrary, we have instances where we have moved overprocurement from one job to another because of changes in plans, and I would not deny that there have been some overprocurements, but I know of no place today where we have large stocks of material unemployed. You may remember, even in the much-discussed Sampson case, that those materials have now all been utilized.

Mr. DAVIS. As far as you know, then, within the Corps of Engineers nobody ever got criticized for this overpurchasing of supplies?

General HARDIN. I have no indication of it having been the basis of a criticism. The only papers I have and the only personal knowledge I have is of this comment upon the committee's complaint.

Mr. Carey points out to me that the overprocurement, in his recollection, was due to the deletion of certain items from the original program, of delay in their undertaking for one reason or another, possibly design, putting money on things on which there was more urgency, but that they were picked up in the next step, and whether it was accidental procurement or whether it was the result of a change in program we do not know at this moment, but it was definitely, according to our information from the field, the result of certain deletions from the original program.

Mr. DAVIS. So far as you know there was nothing in the contract with the constructors that fixed any responsibility on them or placed any limitation on them with respect to the procurement of materials?

General HARDIN. No, it would be contrary to the thinking upon a cost-plus-a-fixed-fee operation. In that case, the contractor is acting as your agent, and he only procures a thing which you approve. In other words, his purchases have to be approved by the resident engineer and he has no great freedom of action to go out and procure on his own initiative.

Mr. DAVIS. That is all.

Mr. FURCOLO. I do not suppose you know what they had to show to the construction control agency to be able to get this material?

General HARDIN. Well, at that stage, Mr. Furcolo, we did not have the control materials plan in effect. This overprocurement was prior to July 1, and the control materials plan went into effect the last of July.

Mr. FURCOLO. In other words, it was not a matter of getting a priority from one of those agencies?

General HARDIN. No. We were dealing in those days on the basis of a defense order, which was merely a statement of urgency, as opposed to civilian needs. A defense order in those days carried a feeling of priority.

Mr. FURCOLO. Off the record.

(Discussion off the record.)

Mr. RILEY. General, is there any information which would show that the contractor had any delay in getting allocations of money to pay for this material, or did that come through without any delay?

General HARDIN. I think these jobs were all financed quite adequately. I have no recollection of any case where Ordnance did not fund their jobs so that we were unhampered.

Mr. RILEY. I ask that question in relation to the testimony we had on the Moroccan situation where they seemed to have had difficulty in keeping a continuous allocation of money to keep the job going and to buy materials when they were 3,000 or 4,000 miles away from home, comparing it to a similar job right here at home where the procurement of materials was a lot easier because they had access to wholesalers and manufacturers, whereas the people abroad did not have that access. I just wondered where the bottleneck was.

General HARDIN. Well, it was a different kind of a problem, Mr. Chairman. The Air Force, of course, had the problem of making limited appropriations extend beyond the total value of the undertakings which they were authorized to begin, and on the other hand Ordnance was not confronted with that problem. These are all funds that are called expediting production funds. They were not out of the military construction Army appropriation, or out of the construction funds for the Air Force. They are a separate kind of money called expediting production funds.

Mr. RILEY. Yes, I recall the appropriation. These expediting production funds did not have to be accounted for as closely either as the regular construction funds, did they?

General HARDIN. That is right. There was no specific definition of application for them.

Mr. RILEY. That is all.

INSPECTION BY COST-PLUS-FIXED-FEE CONTRACTORS

Mr. DONNELLY. Mr. Chairman, an inquiry into the operation of these cost-plus-fixed-fee contracts is particularly cogent because it is my understanding that almost all of overseas contracts are cost-plus-fixed-fee contracts. We have here, in line with your inquiry of a little while ago about inspection on these contracts, a summary of facts with respect to the inspection of the work done under cost-plus-fixed-fee contracts. I ask that this be inserted in the record at this point, Mr. Chairman.

Mr. RILEY. Without objection, it may be inserted in the record at this point.

(The matter referred to is as follows:)

INSPECTION BY CPFF CONTRACTORS

On some Army projects, such as the Elwood Ordnance Plant, Kankakee, Ill., nearly all of the inspection to determine compliance with plans and specifications is being carried on by employees of the CPFF contractor; in other words, the contractor for the most part inspects his own work. At the Cornhusker Ordnance Plant, inspection is carried on by five men on the contractor's payroll and five men on the staff of the corps' resident engineer.

At the Sunflower Ordnance Plant, all inspection is now being performed by a force of 17 inspectors on the resident engineer's staff. In the early stages of this project, the inspection was performed by the CPFF contractor's employees. Because of an Inspector General's report dated April 13, 1951, which pointed out the adverse effects resulting from the contractor performing his own inspection, the work was transferred to the corps.

It is the opinion of the staff that all inspection work should be performed either by employees of the corps or by qualified architect-engineer firms, provided these firms have no connection with the construction contractor.

Mr. RILEY. Would you care to comment on that criticism, General Hardin?

General HARDIN. Mr. Chairman, I must agree with you. I have no criticism to make of your conclusion. We endeavor to follow that principle of keeping the inspection of the constructors separately. They may not have been doing it that way properly in the beginning, but I believe that we are at this time limiting our so-called AECM, architect-engineer construction management contracts, to those few undertakings that are of a development nature. May I have this off the record?

Mr. RILEY. Yes.

(Discussion off the record.)

Mr. RILEY. Mr. Furcolo.

Mr. FURCOLO. In a private contract, does not a private contractor have employees to determine compliance with plans and specifications? In other words, as a practical matter, does not the contractor have to have some of his employees doing that?

General HARDIN. I do not believe I follow you, Mr. Furcolo.

Mr. FURCOLO. This document says on some Army projects, nearly all of the inspection to determine compliance with plans and specifications is being carried on by employees of the CPFF contractor. I understood you to say that you believe that all such inspection work should be done by the Army engineers rather than by employees of the contractor. My question is, as a practical matter, when a contractor has a contract, whether it be a private job or a Government job, does he not have to have some of his own people there to see whether or not he is complying with the plans and specifications?

General HARDIN. I think we must differentiate between a contractor with the Government for engineering services and a contractor with the Federal Government for construction service. In some instances, as I have pointed out, it is necessary to combine the two in one organization because of the reasons I have related about development and security, but it is habitual in the construction industry to have a constructor's work inspected by engineers either employed by the owner for the purpose such as engaging an architectural engineer's services or by using the standing organization of the owner to inspect the work which he is having a constructor do for him.

Mr. FURCOLO. If I might interrupt right there, in such cases is the only inspection that is performed done by such an architectural engineering firm or by such standing company organization of the owner?

General HARDIN. Usually it is both. In certain instances owners who have no engineering organization will turn it over with complete confidence in the engineering firm that they engage to supervise construction. If you were building a house and had no knowledge of construction you might engage the services of an architect to inspect the constructor's activities.

Mr. FURCOLO. I am trying to put myself in the position of a contractor. Is that contractor sufficiently protected if he himself is not allowed to have any of his employees there determining whether he is complying with specifications? Is he sufficiently protected if he has to rely solely on the inspection done by the employees of the engineers in this case? I understood your answer to be just a few minutes ago that all of the inspection should be done by employees who were not employees of the private contractor.

General HARDIN. Then I misunderstood you, Mr. Furcolo.

Mr. FURCOLO. No, that was not my question; that was what I understood you to say a moment ago in your answer.

General HARDIN. I will still stand on my answer, but I misinterpreted your more recent inquiry.

Mr. FURCOLO. I see.

General HARDIN. A contractor or builder, through his own engineering staff, which he generally has, or through his foremen and superintendents, has the plans and specifications available to him. Otherwise, he would not know what he was supposed to build.

Mr. FURCOLO. That is right.

General HARDIN. He must interpret those specifications and plans as he believes they should be, and then that is the way he will construct it. The acceptance of that structure is still in the hands of the inspecting organization.

Mr. FURCOLO. As I understand your position, then, you believe whatever inspecting—and I may use that word loosely as a layman—the contractor will do is more or less being done before the work, or as he goes along and does it, and when you said the inspection should be by employees of the engineers, or by people who were not members of the contractor, you are referring to any inspection done with reference to accepting the finished product?

General HARDIN. Yes.

Mr. RILEY. We will stand adjourned until 10 o'clock tomorrow.

WEDNESDAY, MAY 21, 1952.

ENGINEER PERSONNEL POLICIES

WITNESS

BRIG. GEN. JOHN S. SEYBOLD, ASSISTANT CHIEF OF ENGINEERS FOR PERSONNEL AND ADMINISTRATION

Mr. RILEY. The committee will be in order. General Seybold, we are glad to have you here this morning. I believe you came over to discuss with us the personnel situation; at least, we raised some questions which we are informed you could probably answer.

General SEYBOLD. I hope so, sir.

General HARDIN. General Seybold is chief of our Personnel and Administration Division, Mr. Riley.

Mr. RILEY. General, we raised the question yesterday as to whether or not you had sufficient trained engineering personnel to take care of the vast number of projects, particularly emergency construction projects, which have been turned over to the engineers during this period.

SHORTAGE OF ENGINEER PERSONNEL

General SEYBOLD. Mr. Riley, let me say in the beginning that, being in personnel, I think all problems can be solved if we have sufficient and competent personnel. I think that shortage is the root of all evil.

To begin with, we are facing in the matter of engineers the same thing the country is facing. There is a terrible dearth and shortage of engineers in all branches of engineering. I do not want to go too far in this, but I would like to tell you that I am working with the Joint Societies and their Manpower Commission to improve the utilization of American engineers. As an example of shortages we are graduating perhaps less than 20,000 engineers this year when we need 50,000.

So that the demands on the profession, particularly since Korea, have been all out of proportion. We are competing with industry and the professional people in civil life for our nucleus of people; I mean, we actually are.

GROWTH OF CORPS OF ENGINEERS SINCE JANUARY 1, 1950

It may be of interest just to take a moment to show the growth of the Corps of Engineers since the beginning of 1950, January.

When we began here [indicating on chart] in 1950, January, we had about 5,200 officers. We ran down to just a little over 5,000 in July. And then began a growth which was affected by Korea, in August and September, and now we have reached a total of about 11,200.

The black line shows our authorizations. The lag in getting a man is about 3 months. This growth here is based on a recall program for individuals.

If you will remember, at the time of Korea, the authority was given to carry out a recall program to return Reserve officers to active service. There were four recall programs authorized by the Army and our total recalls for captains and lieutenants finally reached a total of 3,825.

That is part of this increase as shown on the chart.

The other part of this increase comes from the induction of the Reserve units.

This red line is the Regular Army and you will see that it actually increased only about 175 from this period to that period [indicating on chart]. Yet, that is significant in our present problem.

Now, in addition to this we were authorized in December of 1950—that is, General Pick requested G–1 to authorize him to recall 25 field-grade officers for the specific purpose of carrying on the military-construction program.

At that time, in response to the request of General Pick, he was given a rather blanket authority to call in specific officers with military construction or construction experience, with limitations.

Under that authority, which existed throughout most of the year, one-third were to be over the grade of major and the colonels were to be chosen for specific difficult jobs. They practically had to be name jobs before we could call the Reserve colonels.

In that program we actually screened 1,000 files, 1,000 people. One more limitation was placed on us, and that is that the officers had to be of the Inactive Reserve. Officers with mobilization assignments were generally not available.

So that in the first place these people were not volunteers. I think the volunteers in the group selected were actually limited to around 12 percent due to lack of desired talent. Most of the officers so obtained were actually involuntarily inducted.

But out of that total group we got 73 that were specified and that we had screened out of the original 1,000 and they were placed in the military-construction program.

Likewise, later on that year, they authorized a recall of field officers. That was a general recall for 120 officers. The grade breakdown that was definitely prescribed was, 32 lieutenant colonels and 88 majors. This was a general recall administered by the armies. We wrote to the armies requesting that they make every possible endeavor to obtain qualified construction officers. The armies, however, were beginning to feel the effects of Korea and their prime interest was troop officers.

Also I may point out, Mr. Chairman, that out of that group of 120 we got 16 who we felt were qualified to put in this group.

PROBLEM OF FINDING QUALIFIED PERSONNEL

The problem of finding qualified people—well, you will not find them below the grade of captain; that is definite. They have not the experience, they have not the training that we want to step immediately into these jobs. The ones with proper qualifications were at least majors or above.

So that there has always been this limitation, and that is based on the general Army program, which everybody appreciates, that the top grade of colonels, and so forth, are extremely difficult to get. Likewise, the people—and I know this from personal experience, and I think General Hardin does, too—the people who had experience in World War II with the cost-plus contract were older men. And they are gone. People who fight one war are not the people that fight the next. So those chaps generally are out. They are either nonacceptable physically or else they are too old. Anyway, we find that we just do not get them. And we require people with considerable construction experience to be placed in these key jobs.

In September of 1951 we again went after a group based on that letter of authority and we screened 400 more, of which we accepted 150 and finally were able to get 50 people into this service.

As an example of the lag time, we started this in September of 1951, when I was here, and in April of this year that authority was taken away due to the fact that it was found that the Army had sufficient numbers of people. The authority for recall was withdrawn as the

Army had its total authorized numbers. I had 20 people in this group who were under orders, who were dropped.

That lag is understandable, if we think a moment. We select a man, send the request back to G–1. It then goes down to the various States and the armies and they tell this chap who is an involuntary returnee that he has to come to service. Of course, he has to get his affairs in shape and generally is granted 3 months' deferment of time.

We understand that. There is no way out of it. I do not think you can expect a man to turn over his business in any shorter time. But it is one of the problems that is basic here.

Following the termination of the recall program, we asked the Chiefs of Staff if we could not be granted the same authority to support the construction program as was granted the Medical Corps and the Chaplains and the Judge Advocate General, who were allowed to bring in selected, qualified people for their type of work, which was so difficult to fill. And the staff said that they could not support us in that due to the lack of spaces in officer authorization.

In April of 1952 General Pick personally, I think, saw Mr. Pace and he arranged with Mr. Pace to bring back 24 additional highly qualified construction field grade officers for this program.

Our problem is that the quality required is a quality of officer that even in the Regular Army is in such high demand: that is, it is a group of officers in the bracket of colonel and high-grade lieutenant colonel, graduating about, say, maybe early 1930, 1935, 1936 and maybe dropping back to 1928, who have had sufficient experience, who have been seasoned; and those are the people that are in high demand by all of the military and construction programs throughout the country.

So we are not competing with a group of 11,000. We are competing with a group, or trying to handle a group that is very small in number, with those requirements.

CALL UP OF RESERVE UNITS

Of course, there has been a field that we explored, and I think rightly, to the fullest extent; the Reserve units that were brought in. Some of those Reserve units are sponsored by the AGC, the Association of General Contractors. They have the type of men we want who are running those units. That is, one or two of the senior officers possibly, in those units would be capable, but not more, because then you fall off and get to those people who are experts in equipment, or other experts, but down in the lower brackets.

Now, there was an immense resistance on the part of these Reserve officers, when an attempt was made to separate them individually from these sponsored and affiliated units, due to the fact that they had been brought to understand, and I think rightly so, that these people would go out as a unit and come back as a unit and would be known as the Fort Worth group; esprit de corps, you see.

Well, that got into very serious trouble; there was every possible—maybe the word is "pressure"—but anyway, everybody wanted us to keep those units intact. So finally it was agreed that they would remain with those units for 4 months and then they would be subject to recall to individual assignment.

MOVEMENT OF ENGINEER OFFICERS

I think there is another interesting chart here; it may not be exactly on this point, but it shows you our difficulty. This is the movement by months of engineer officers from January of 1950. The effect of the rotation from Korea begins right in here, in May and June of 1951. You will note this top side shows the movement to the theaters. This is the movement in the zone of interior, in the United States.

Mr. RILEY. Which one is the zone of interior?

General SEYBOLD. Down below here. This, up here, is overseas.

Now we have around 250 every month moving to the theaters and we are beginning to get returnees, but, of course, this [indicating] always lags and there have been something like an average of 165 coming back.

That means that in the pipeline we have 250 and 160, which is 410 per month. And these people are not effective for 3 months.

So, out of our 12,000 people, the total ineffectives in our pipeline due to the movement is terrific.

In this group here [indicating] the majority are the younger lieutenants and captains and field officers and other officers, but there is the same proportion of qualified construction men in here because they, too, are in great demand in the theaters.

Mr. RILEY. Why is there so much changing back and forth there?

General SEYBOLD. The rotation program that has been instituted to return these officers from the theaters, particularly Korea.

Mr. RILEY. And that rotation applies to the engineers as well as to the rest of them?

General SEYBOLD. Yes.

Mr. RILEY. Do you mean that you put a man on a project and then when the project is about 30 percent completed, if his time has arrived for rotation, you bring him back and send out a green man to finish up the project?

General SEYBOLD. Most of these are combat troops, combat engineers; and also those who are backing up the construction program in Japan and Korea.

Mr. RILEY. These are mostly combat engineers?

General SEYBOLD. That is right. But I want to make the point that there is a percentage out of the same type of man whom we need so badly in our construction activities.

NUMBERS OF RESERVE OFFICERS ABOVE GRADE OF CAPTAIN CALLED IN

Mr. RILEY. Coming back to this matter of getting available engineering brains and talent to help in this emergency program, am I to understand that you were only given 25 Reserve officers above the grade of captain who could be called in?

General SEYBOLD. No, sir.

Mr. RILEY. How many did you call in from your Reserves above the grade of captain? Do you have that figure?

General SEYBOLD. I would say that of this special group that we have been speaking of that were definitely called in for construction work, there is a total of approximately 156.

Mr. RILEY. Of course, we are primarily interested in those engineers who were called in for construction.

General SEYBOLD. That is right. But I thought you would be interested in this big problem.

Mr. RILEY. We are interested. Were these all of the engineers with the experience that you needed for this construction program, in your opinion, or could you have advantageously used more than that number?

General SEYBOLD. Yes, sir; I think so. If we had more, we could have used more.

DIFFICULTY IN OBTAINING TALENT REQUIRED

Mr. RILEY. Was the reason why you did not call in more the fact that you had a ceiling put on you by somebody?

General SEYBOLD. No, sir; I think, Mr. Riley, it was just the general difficulty of obtaining the talent that we needed, because, as I said, in order to get this group of 73 we actually screened 1,000. To get the 50 that were later picked up in September we screened 400. Unfortunately, the talent that is generally more available in the Reserves is in the Active Reserve, and we were not authorized to go into the Active Reserve, where I think our total was somewhere around 10,000 or 11,000—I do not know, but it was well up. But we were held by general limitation to these nonmobilization designations or the Inactive Reserve. I see the reason behind that policy, but it did affect our program.

LIMITATION ON NUMBER OF OFFICERS ABOVE GRADE OF CAPTAIN

Mr. RILEY. I gathered the impression the other day when General Nold was testifying that somebody, somewhere, had put a ceiling on the number of officers whom you could recall above the grade of captain.

General SEYBOLD. That is true.

Mr. RILEY. I am just wondering whether or not that stymied your program to some extent.

General SEYBOLD. It has since the early part of this year; that is correct.

Mr. RILEY. Now, let us be perfectly frank——

General SEYBOLD. That is right; it has since the early part of this year.

Mr. RILEY. We want to find out who made these decisions so that we may decide whether they were made properly. They may have been 100 percent right; I do not know.

General SEYBOLD. May I say that we are a slice in the Army.

Mr. RILEY. I realize that.

General SEYBOLD. Of the total numbers that are set up, and that goes back to the appropriations that can support them and out of that they deal us so many.

Mr. RILEY. I can understand that part of it. But it occurs to me that this construction program is of such an emergency character that they could allocate more officers in proportion to that program at least temporarily than to some other phase of the program; because certainly you cannot operate unless you have bases.

General SEYBOLD. Yes, sir.

Mr. RILEY. And you cannot even train your troops unless you have bases.

General SEYBOLD. Our average troop officer strength, among our own troops, is less than 60 percent authorized today, and in those troop units very, very few have more than one field officer. So we concentrate our strength of qualified people in construction activities.

Mr. RILEY. Is it difficult to get trained civilian employees with the qualifications required for this work at the salaries that you are authorized to pay them?

General SEYBOLD. Yes, sir.

Mr. RILEY. That, then, is the difficulty as far as the civilian workers are concerned: it is largely a matter of compensation and also the fact that the people whom you would like to have have interests of their own which they are very loath to leave.

General SEYBOLD. And, of course, another thing is the fact that the people we want are already in construction. They are working for a contractor some place else and it would just be a matter of transferring them. I think I am right when I say that the basic supply is so short all the way around, that we only have a number of people with these skills, whether they are in industry or with us or with the Navy or someone else, that there just are not enough to go around.

Mr. RILEY. Let me ask you this: Could you have obtained an additional reasonable number of qualified engineers had this ceiling not been imposed upon you?

General SEYBOLD. I think we can say "yes" to that, since the first of the year.

Mr. RILEY. 1952?

General SEYBOLD. Yes.

Mr. RILEY. That would not have been the case in 1951?

General SEYBOLD. No, because—oh, you mean these limitations that were placed on us as to where we could get them and what their grades were and so forth? I believe this: That had we had the opportunity of screening and obtaining men from the entire Reserve, yes.

Mr. RILEY. When was this restriction as to recalling officers above the grade of captain lifted—I mean engineer officers?

General SEYBOLD. If you are speaking of grade alone, sir, we had the authority as far as the grade structure was concerned, from the beginning to recall construction specialists under specific conditions.

Mr. RILEY. But I understood that you could not recall a Reserve officer above the grade of captain in the Engineers?

General SEYBOLD. No, sir.

Mr. RILEY. Did not General Nold say that?

Mr. DAVIS. Just since the first of the year: that is the only time in which that applied.

General SEYBOLD. That is right.

Mr. RILEY. The restriction was imposed——

Mr. DAVIS. As of the first of this year, this calendar year.

General SEYBOLD. That is right.

Mr. RILEY. Could you call in anybody with engineering qualifications and experience whom you needed, regardless of rank, who was in the Reserve?

General SEYBOLD. No, sir.

Mr. RILEY. Tell us what you could do.

General SEYBOLD. To answer your question, the answer is "No." We were authorized to select specially qualified Reserve officers for construction. The restrictions were that only one-third should be above the grade of major—I am now speaking of grade restrictions—and that only a selected few for specially selected jobs would be full colonels. Otherwise there was no restriction on grades. That resulted in the recall of officers mostly in the grade of major and some lieutenant colonels, with a very few full colonels, because they had to be picked for positions. That is the grade structure that was allowed in the year 1951. Now——

Mr. RILEY. Before you go any further, that did impose restrictions on you in the matter of getting an adequate number of trained engineering officers to carry on this vast program—and it was a vast program, probably as large a program outside of wartime as had ever been attempted; is that right?

General HARDIN. Yes, sir; I can say that that is true.

EFFECT OF RESTRICTION AGAINST CALLING IN ACTIVE RESERVE OFFICERS

General SEYBOLD. The other restrictions were that the officers could not come from any mobilization designation, meaning that they would not be Active Reserve officers assigned to a Reserve unit.

General HARDIN. You might tell the chairman what that left you in the way of a pool to draw from.

General SEYBOLD. That left, Mr. Riley, a group of officers—around 8,000, I think; I do not remember the exact number, but they were the ones who were only involuntarily returned to duty and who never expected again to be called to duty after World War II and who, I will not say resisted, but nevertheless were not in accord with the call. They had not had any active service as Reserve officers of any type since World War II.

Mr. RILEY. I can appreciate the position of the man who had his own going business, and who was very reluctant to be called back into the Army, which would mean breaking up his business, because it could not operate without him, in most instances.

General SEYBOLD. Surely. And the armies, too, were very lenient with these people. They did not insist upon it.

Mr. RILEY. Why were not the engineering officers in the Active Reserve called in?

General HARDIN. My understanding of the reason why the Reserve officers who were assigned to units and carried in the active status were not disturbed in accordance with the Department of the Army's policy, was that they desired to keep these units intact. A great deal of time and effort had been expended in organizing them and going through their Reserve training and they wanted to keep these units intact so that if a mobilization call came, those units could be quickly put into the field.

Mr. RILEY. They were largely trained for combat engineering service?

General HARDIN. Not entirely; no, sir. There were both types, the combat engineer and also what we call the general service engineer. All of them are combat units. They are equipped with arms. But some of them go up in the forward areas with the fighting infantrymen

and support them, whereas other types of engineer units, the general service types, are used in the rear to maintain the lines of communication and do the heavy construction.

Mr. RILEY. Still, all of it could be classed as combat duty?

General HARDIN. It is all combat duty.

General SEYBOLD. There is one more restriction that was placed on us, too, and that was that Reserve officers, serving with civilian employees in the Army would not be ordered to active duty to serve in the same or similar positions.

Mr. RILEY. Will you please repeat that?

General SEYBOLD. The Reserve officers, serving as civilian employees in the Army could not be ordered to active duty to serve in the same or similar positions.

Mr. RILEY. You had their services already?

General SEYBOLD. They could not be ordered—in other words, we could not take people who were serving in the Army in civilian positions——

Mr. RILEY. But you already had their services.

General SEYBOLD. Yes, but they might be on civilian work and they could not be transferred. It was just another limitation.

UTILIZATION OF ROTC ENGINEERING OFFICERS

Mr. RILEY. General, we have had some testimony that has led us to believe that on some of these construction jobs there were an insufficient number of trained inspectors or experienced inspectors. What becomes of the ROTC engineering officers who are called into the Army?

General SEYBOLD. Of course, that younger group right now are first given schooling, an associated course at Belvoir.

Mr. RILEY. Take a man with an engineering education; is he put into the engineers or do they sometimes make him a line officer?

General SEYBOLD. Most of those younger engineer officers who come out of the engineer ROTC—I assume that is the group you are speaking of?

Mr. RILEY. Yes.

General SEYBOLD. Most of them find their way into the combatant portion of the service. They are boys with, of course, a degree but with no practical experience.

Mr. RILEY. I understand that; but it would seem to me that you are losing a great deal of their training when you put them into an Infantry division, when you are so short of engineer training, even though they lack experience; because they could be used on minor jobs, as inspectors, performing services of that kind and they would be carrying out construction. They would know enough to carry out constructoin.

General SEYBOLD. Yes, sir. But, of course, we are under such pressure to maintain our troop strength in Korea. I only wish we could do those things, but you see, there is another thing: We are losing officers now at the rate of about 60 officers a week, our most experienced officers, those who have been in service now since this recall time of late 1950. They are going out. They are of the grades of lieutenant and captain—first lieutenant and captain and major. We are replacing those. Our only source of procurement of those now is the ROTC and

the OCS, so that the average of our grade structure and experience is dropping away down.

Mr. RILEY. I want us to get to the point where the confidence of the general public in the military organization is restored at least to some extent. The average citizen will tell you that the Army is not using the qualifications of the men they have, and that are available to them, in the right places. And they will cite you instances. I had an instance, not from my own State, but from one of the large industrial centers, where one of the services took a qualified pharmacist, a man who owned his own drugstore, called him in, so that he had to sell his drugstore at a loss, and put him to work weaving little baskets or pocketbooks, or something of that kind; and then after about a year, they turned him out and he had no business and no job.

That is the sort of thing that inflames the public against the armed services and gives them their opinion as to the efficiency of the operation of the armed services.

General SEYBOLD. I understand that, Mr. Riley and those cases appear daily from our own headquarters, where they investigate these examples that you speak of. The only thing that can be said of that is that each individual case has to be examined. Oftentimes—and I hope you understand that I am not speaking of the case that you just mentioned—in so many cases it is the will of the man himself. The man will want to serve his hitch and then come out, so he can go back to his normal civilian life. We have hundreds of qualified engineers who have taken such a stand, who have been drafted. Our big problem is actually a shortage of engineering talent because we are forced to maintain the troops in Korea and the back-up support. That is primary. So that we have to keep those units in that theater up to top level and we have to move them back and forth. We could take those ROTC boys and do that, but they are so vitally needed to lead troops. We have not anyone else. I know it is difficult to see, but we have not the leaders; we have not got them.

DISCUSSION OF PRACTICE OF NOT PLACING PERSONNEL WHERE MAXIMUM USE CAN BE MADE OF TRAINING AND EXPERIENCE

Mr. RILEY. I realize that, I think very definitely. And yet I am going to be very frank with you. I am not convinced that the Army screens its personnel as it comes to it. When I say the Army, I mean the armed services. It does not place its men where it can get the maximum service from their training and experience, does not put them into the service which they are best qualified to perform. I have just run into too many instances of that kind not to have that impression.

General SEYBOLD. That is right. It is just due to the extreme enormity of the problem. I do not think that the Armed Forces can be compared to any other organization in the matter of personnel. There is another thing. Each individual when inducted tells us what he can do, and is then given the MOS, which may say that he is a caterpillar tractor driver, or something else, and that follows him through his service. But, going back to the personnel actions, if we were to follow each of our millions of people, it would require thousands of

people to do it and pretty soon you would have an overgrown personnel group and you would lose the benefits.

General HARDIN. Mr. Riley, perhaps I can help you to see the problem if I may ask General Seybold a question.

Mr. RILEY. I should be glad to have you do so.

General HARDIN. I believe you are interested primarily in the officer group and the part that they might play in this construction program?

Mr. RILEY. Yes.

PREFERENCE OF RESERVE OFFICERS TO SELECT TYPE OF SERVICE

General HARDIN. Is it not true, General Seybold, that officers in the Reserves exercise a certain preference under their rights and privileges, as to what type of service they will render? Even though they may be professional engineers, they may choose to serve in the artillery or in the infantry; and in our way of life we have not yet reached the procedures that have been followed by other countries, of overruling this preference of the individual and making him go into whatever slot we feel he is best fitted for. That does play a very large part in getting officers in the proper places. It is a matter of individual preference, as I understand it. Is that generally true?

General SEYBOLD. Yes, that is definitely true. There are many civil engineers who are artillery men, and they are happy in those slots.

General HARDIN. It begins away back in the ROTC where the student has a preference. In some institutions we do not have engineer units, even though it is an engineer school, in the sense that they offer an engineer course.

Mr. RILEY. By any chance is that somewhat influenced by the fact that promotions in the Engineer Corps are slow?

General SEYBOLD. I do not think so. I would say that our promotions are on a parallel with the other branches; not ahead of them by any means, but on a parallel.

General HARDIN. I can say, I believe, in fairness to the ROTC structure, that not all students are enthused over the idea of a hard service, such as combat engineers are required to perform. Many would prefer the Air Force or the Navy. But it is pretty well known that combat engineers have a rather rugged time and you will find that a good many students are not interested in following that activity.

Mr. RILEY. Naturally, we should not like to disturb the right of a man to express his preference, but there is such a thing as salesmanship and persuasion; and I am rather of the opinion that the majority of Americans, at least if they realize that you had an emergency need and requirement in a certain category, would put aside their personal preferences in many cases, in order to fulfill that need.

General SEYBOLD. Mr. Riley, it is our observation from working with the Reserve officers who are on the outside and particularly this group, that each and every one of them has in mind that this is not an emergency, but if the time came, surely, he would drop everything and come; but right now they feel—I will not say business-as-usual, but they do not think—that it has reached that point.

Mr. RILEY. I think you are quite right about it. I have heard that same sentiment everywhere, that "I would not mind going if it were an

all-out emergency, but inasmuch as this is just a little police action, I think my services can be better used somewhere else." I have heard that time and time again.

General SEYBOLD. That is what we meet.

Mr. RILEY. But, coming back to the engineers, of course I think anyone who has a knowledge of engineering problems and work would say that it is hard work. But I have heard over and over again that promotions were slower in the engineers than in any other branch of the service and I am just wondering whether or not that is a deterrent to getting young, well-trained officers into the engineers.

General SEYBOLD. Well, to be very frank, Mr. Riley, I do not believe that that is so. On the other hand, I feel that a real engineer is one who is going to follow that profession, just as an artist would his. He either is or he is not. That has been my experience. I do not know whether General Hardin feels that way, but as to these others, possibly they are looking forward to something different. But you cannot keep an engineer away from engineering. On the other hand, I do not put much faith in the claim that promotions are slower, particularly in the ranks that we are talking about.

Mr. RILEY. In view of what you have just said, it would indicate that some higher authority is putting these boys in positions other than engineering, when they could be used in engineering. That comes right back to the inquiry I made a short while ago as to whether or not you are utilizing the best talents and training that are available.

General SEYBOLD. You mean the engineers who are really good artillery men? Of course, the Army has a demand, like no other organization, for leadership, actual leadership of people. When I say the Army, I mean the Department of Defense. And that quality of work and leadership is found so often in the man who is an engineer.

Mr. RILEY. Why should you not put him in there to get this construction work done and eliminate all this waste and extravagance that we hear so much about?

General SEYBOLD. Mr. Riley, of course, I do not think I can agree about the waste and extravagance. I know that it is inconclusive, but I had hoped to show you how we had attempted under the directives that were available—and also I would say at the same time that I feel these directives were reasonable—to fill the requirements with selected officers.

General HARDIN. Mr. Riley, I believe General Seybold will bear me out in this, that even from the beginning of the present emergency there has been a high-level policy established generally to this effect; that if a civilian can do the job, there will be no use made of a person in the military organization to do it. That might be a crude way of saying it, but we have been from time to time instructed that we will use civilians to do the job and save the man in uniform for the special job which requires a uniformed man, because it is implied that by the wearing of the uniform he has had some other training that the civilian has not had an opportunity to receive.

Mr. RILEY. I can well understand that position. I have one more general question. We were thrown into an immense construction program and the expediting of that program was considered very necessary, a year ago, now nearly 2 years ago. It would appear that the engineer organization did not have the personnel to carry out this program as efficiently as they should. I am just wondering if, in your opinion, every possible avenue was explored and every possible means used to get the men into the organization, to plan this program, to carry out the inspection, and to see that the program was carried out in an orderly manner such as would be approved by the best engineering practices. That is the whole thing.

General SEYBOLD. I think so; yes, sir.

Mr. RILEY. Now, was that done?

General SEYBOLD. Yes, sir.

Mr. RILEY. Or did you underestimate the magnitude of the task and find that you were lacking at a time when you needed people?

General SEYBOLD. I did not.

General HARDIN. I agree with General Seybold on that, Mr. Riley. I am a little disturbed—I guess the world is disturbed—to hear you say that this program has not been carried on effectively. I can understand how you could reach that conclusion, but I believe it is because of the fact that you only hear of the deficiencies that are brought to your attention, but I wish you would try to weigh those deficiencies against the tremendous amount of good work that has been done and that has been beyond any criticism, and I think if you thought in terms of dollar volume alone you would be impressed with the great work that our architect-engineers and constructors in this country have done. I think they deserve great credit for doing it. I think men like Mr. Carey of our civilian staff and hundreds of others have gone all out to serve in this emergency. To say that this was improperly or inefficiently handled is not treating them fairly, and I wish you would look at the deficiencies as opposed to the tremendous accomplishment that has been made. Again I say, I think in all fairness that I think there is some undue weight being placed on the deficiencies that are brought to your attention.

Mr. RILEY. I want to assure you that as far as I am concerned, and I am sure the other members of the committee also feel the same way, that we are going to be open-minded on this, and we are not going to reach any conclusions until all of the evidence is in, but I am posing questions that the public is asking, and I want to know the answers.

General HARDIN. I think you are entitled to the answers. Maybe if we showed you how much has been accomplished it would help to put the thing in the right perspective.

Mr. RILEY. I am sure that will enter into it, and I am sure it will enter into the conclusions that the committee finally resolves, but the reason we are posing these very frank, and maybe sometimes embarrassing questions, is to try to get an answer to either give a reasonable reason to people as to why these things were done or why they were not done.

Off the record.

(Discussion off the record.)

Mr. RILEY. Mr. Davis.

RESTRICTION ON CALLING IN ACTIVE RESERVES

Mr. DAVIS. Is it not true, General, that the decision with respect to the calling of officers who were in active or in organized units was made at a higher level than the Personnel Office within the Corps of Engineers?

General SEYBOLD. Yes, sir.

Mr. DAVIS. Where was that decision made?

General SEYBOLD. I think it was at the Chief of Staff, or at least along with that, or even in the Department of Defense, in the Secretary's Office.

Mr. DAVIS. From what source did you receive the directive as it applied to you?

General SEYBOLD. That was before my time, but it came through G–1, of course, of the Army.

Mr. DAVIS. Is it your opinion that there was a substantial or a large number of qualified engineer officers who were kept in moth balls in these active units instead of their services being available to you during this so-called crash program for construction?

General SEYBOLD. I think that group had some well qualified officers in it that would certainly have aided us immensely.

Mr. DAVIS. And there has been no revision of that policy of keeping these officers in active units in moth balls, even through the crash program, as such, no longer exists?

General SEYBOLD. They have not changed the authority of recall of those. During this interim of time a very minor number of reservists out of the Reserve units have been called into service, but the bulk of them are still in that same status.

Mr. DAVIS. We have had other statements made from time to time with respect particularly to the Moroccan program, that one of the difficulties there was the lack of personnel, or number of personnel, to do the job of administration and supervision that was needed. I gathered generally, though, from the testimony that both of you gentlemen have given that there is no general feeling within the Corps of Engineers that this condition was true on an over-all basis.

General SEYBOLD. That was certainly the position of Personnel.

General HARDIN. I agree in that with respect to the personnel for the Divisions and Districts. We have been woefully handicapped in the administration of the program from the Washington level because of the freeze which was put on all personnel in Washington last year. We have endeavored to overcome that artificial handicap by every conceivable means, and we realize that we are not doing many of the things that we should be doing just because we have not the means to do them with.

Mr. DAVIS. Is this generally true that those engineering officers in active or Organized Reserve units are in groups that would be commonly referred to as combat engineer groups other than what we might call, for this purpose, construction engineer officers?

General SEYBOLD. No, that group had both in it.

Mr. DAVIS. Would you not say, in view of the urgency of the construction program, at least—at least the conception of urgency that existed—that, as far as the activities of the Corps of Engineers were concerned that your position was one of full mobilization?

General SEYBOLD. Well, we had the same problems, and it was to an extent the same urgency rate, probably not to the extent, because there was the very extreme importance again, as I say, on the troop side, of supporting the Korean operation. We went in there with a strength of approximately 9 percent of the troops and, like always happens, we wound up with about 20. It never fails, and that was a draft on our Reserves there.

Mr. DAVIS. I do not believe I have any further questions on that, Mr. Chairman.

INSUFFICIENCY OF ENGINEER PERSONNEL TO PROPERLY MAN CONSTRUCTION PROJECTS

Mr. RILEY. General, I believe we have had testimony here, and I would like for you to reiterate whether or not it is true, that on one of these construction projects the final decision is always with the Army engineers.

General HARDIN. In regard to executing the contract, that is true, Mr. Chairman. He is the contracting officer, and he holds the responsibility finally for the decisions and the actions that are taken on the project.

Mr. RILEY. Now, we have had some very definite testimony in more than one case that these officers have worked day and night under heavy physical strain because they did not have sufficient personnel to help them. It is my thought, based on experience, that a man cannot do his best work when he is physically exhausted, and that is the reason I have made some of the inquiries that I have, because unless there is some testimony to the contrary, I am still of the opinion that you did not have sufficient men to properly man some of these jobs, at least, and while they did everything humanly and physically and mentally possible on the job, there is just a limit to what one individual can do.

General HARDIN. Well, I think that is a very fair statement, Mr. Chairman. I know that that has been the case in many instances, particularly over short periods of time, and I think it is habitual on the part of our district engineers and their assistants, and division engineers, as well, to work harder than the average person. We pride ourselves somewhat on the spirit of the Corps of Engineers which leads us to do a little bit more than the minimum, and I have no doubt but what in many areas of this country and abroad that our people could have used and used advantageously, more assistance both in the commissioned grades and in the civilian field.

FEASIBILITY OF CALLING IN ACTIVE RESERVE UNITS

Mr. RILEY. Let me ask this question: it develops here that there is considerable talent in the active Reserve units that could have been utilized, but these active Reserve units were more or less held in reserve for general mobilization which seemed to be impending at one time or another. Would it not have been feasible to have called the units in and put them on this construction program and then, if general mobilization had occurred, to transfer them into units?

General SEYBOLD. Well, as I said earlier, Mr. Riley, when you reach in as a personnel action to take out certain individuals from an affili-

ated unit which we were mainly speaking of, and they are the cream of the crop, there is an immediate practical explosion that comes from the community and all the people around who are interested and from the association of general contractors because these units had been built up and had been trained and had been brought up with the thought that they would act as that unit and would go out as a unit. So, after considerable difficulty we finally got them to agree, and that was a high-level decision in G–1, that the minimum time that an officer would be held with the unit was 4 months, and after that, you might say in specific occasions, we could take that man and utilize him in the other program. I see the reason behind it, and I see the same antipathy of the individual to leaving his gang. On the other hand, it did cause difficulty.

Mr. RILEY. If you had this experience and built them in these units, would it not have been much easier to have transferred them into general mobilization after you had them in service? That was not done, was it?

General SEYBOLD. Well, there were not very many of those affiliated units brought in, very few, and most of them that were brought in were labeled for the Air Forces which were untouchable for our use.

Mr. RILEY. Well, a lot of this construction was for the Air Force?

General SEYBOLD. That is right.

Mr. RILEY. That, however, was not your decision, but the decision was made higher up.

General SEYBOLD. Yes, as to those Air Force units.

Mr. RILEY. Who makes that decision?

General SEYBOLD. I think that is an agreement between the Air Forces and the Army.

Mr. RILEY. Who are the agreeing officers?

General SEYBOLD. That probably gets to the secretarial level of the Air Force.

Mr. RILEY. Well, somebody recommended it to the Secretary.

General SEYBOLD. Well, I would not know who over there in the Air Force is behind that.

Mr. RILEY. As I said a while ago, I am going to reserve my decision, and I am going to be just as open-minded as I am capable of being, but it appears right now that this is one of the weaknesses in this construction program: that you did not have adequate, trained, qualified personnel to supervise some of these jobs.

General SEYBOLD. I can add this to it, Mr. Riley: to my knowledge we have only been requested to take personnel action on two cases to pull a man out who is incompetent.

Mr. RILEY. Well, that is a good record, and I do not know that too many were incompetent. I think they were just overworked to the point where they sometimes made decisions that they would not have made if they had had adequate personnel to assist them.

OVERHEAD EXPENSES OF CORPS OF ENGINEER PROJECTS

General HARDIN. I would like to make this point, Mr. Chairman, that we are constantly being told to do an economical job, and to do an effective job. Now, if we are not very stingy with the amount of payrolls for the Government force that we have on these jobs our over-

head rate climbs up very rapidly. For the last 3 years, beginning with 1949, we were under severe attack by the Army and the Air Force on account of what they called our overhead expenses in doing work for them, and we have had endless studies and justifications for the cost of doing this work. I have a paper before me here this morning which is the latest summary of what it costs to do work in our various divisions, and we are proud of the fact that we have brought down the overhead rate from 1949, when it was 9.4 percent all over the United States, down to the present figure of 8½ percent. Now, that includes Engineers, that includes the preliminary planning, that includes administrative expense and administering these contracts, it includes everything that goes into the Government cost, design engineering, construction engineering, and supervision insofar as administrative expenses, division, district, and general overhead are concerned and the cost of telephoning, and things that cannot be charged to any particular job, and we are under great pressure to keep these costs down.

We have been investigated, and your own Appropriations Committee asked just the other day—no, it was not the Appropriations Committee—it was the Committee up here on Military Affairs—where does the money go that the Corps of Engineers gets for running this work, and why does it cost the Corps of Engineers 9 percent to do it when you can have it done in civilian practice for 4½ or 5 percent. So, there are thousands of reasons for it, and you can see that we are under pressure from both ends. We cannot overstaff these jobs.

VALUE OF STRUCTURES OF CORPS OF ENGINEERS FOR MEETING EMERGENCY SITUATIONS

Now, if it had not been for the structure of the Corps of Engineers, which is available to the Nation in time of emergency, resulting from our continuing operations on civil works, so-called rivers and harbor and flood-control improvements that go on from year to year, we would have had no structure with which to have begun this emergency work. All of those people who were engaged in their civilian pursuits of carrying on the Nation's public improvements, which, Mr. Donnelly is well aware, were immediately made available, in large measure, to prosecute this emergency military program for the Army and the Air Force.

Now, we began, then, with that structure when this emergency came and it has been expanded—it has been expanded to a very large degree, but we dare not overexpand it. There comes a balance there of what we can do without robbing the businessmen of their limited professional people, without destroying the architect-engineering firms, and they have got to earn a living. If we go out and recruit additional people from those sources we are only getting individuals, and not getting the experience of the organization that would go with them had we left them undisturbed, and we feel that there is a limit to which we should build up our Government force in such an emergency and rely upon what have been said to be the people who have the know-how.

Mr. Mahon, if you will remember, made some comments in the hearing we had on one of these Moroccan bases not long ago. He said

something to the effect that the Government forces did not seem to be able to do a job assigned with the use of the same procedures that industry uses. Well, that is what we have tried to do.

Mr. RILEY. Your ratio of costs would automatically come down with the increase in the volume of the business.

General HARDIN. Yes, sir.

Mr. RILEY. And where you have billions and billions of dollars, as you do in this program, you could easily lose in the actual construction work considerably more money than it would take to get this supervisory talent, is not that true?

General HARDIN. If I thought that there was widespread deficiency I could not help but agree with you, but I have never been convinced that there is this widespread deficiency, and I think if your investigators had had more to present to you in the way of deficiencies they would have brought them in. The number of deficiencies as against the number of going operations that we have, in my mind, is rather limited. They were out in the field for 6 months, if I recall properly, and we gave them every opportunity to go through any job and all of the files. As I know the picture we assisted them in their investigations.

COMMENTS ON DEFECTS IN OPERATIONS UNDER EMERGENCY PROGRAM

Mr. RILEY. If there is any general weakness in the present procedures and policies that you know of, would you care to comment on that and give the committee the benefit of what you think could have been done, looking in retrospect now, as against what has taken place?

General HARDIN. Well, I would have to gather my thoughts on that subject. It is an extremely important topic. I think that if there is one thing that we should tend to avoid in another emergency it is that false sense of urgency. I think if we do immediately go into another such situation as we have faced we might be more reluctant to embark on some of these construction programs, we might be inclined to drag our feet, to use a slang term, to a greater degree than we did.

We jumped at some of these undertakings, I think, in the spirit of doing something right now, whereas if we had been, maybe, in better possession of the facts, of the true picture, and I do not know who could have given it to us, we might have said, "Let us go slow on this, let us not do some of these things that we are trying to do in days that should take weeks or months to do." It think that is one field where we have been over-enthusiastic in supporting the defense requirements.

When they told us they wanted something on a certain day we did everything that we could think of from the construction and management standpoint to get that end result, and that is in keeping, of course, with the military doctrine which is ingrained in us throughout our service schools, and years of training, that in an emergency you are buying a commodity which is time, rather than something else. It is inherent in our whole approach to combat engineering, and I think the Air Force and the Army whom we were serving gave us some very impossible dates to meet. We did our best to meet them, and I think if we had to do it over again, in summary, we would say, give us more proof that you have got to have it at this time.

I know that would be my attitude now, and as far as our procedures go I think I would be less inclined to use cost-plus-fixed-fee contracts on things which the using services said we have to have started right now, and we will tell you more about what the full requirements are when we determine those requirements. This cost-plus-a-fixed-fee operation, which I discussed with you at length yesterday, comes from thinking that is inherently a production man's approach to a problem, and it has been applied to construction. While the construction industry on a private basis uses this approach and cost is not a particular concern of private ownership, I do not think that the cost-plus-a-fixed-fee operation lends itself to Government operations in construction. There are just too many pitfalls in it. It should be reserved for the extreme cases of emergency which, again, I think has been overdone in this present emergency, and I believe my studies will bear me out in that thought.

Mr. RILEY. I, for one, and I speak only for myself, am thoroughly convinced that in the case of many of these projects they had not reached a firm decision as to what they wanted before they told you to go ahead with them.

General HARDIN. There is no question about that, Mr. Chairman.

Mr. RILEY. I am absolutely convinced of that.

General HARDIN. You can see that in thousands of cases—that is a little exaggeration, because we do not have a thousand of those jobs—but in many cases the development of these projects has been piecemeal. I do not say, in all fairness to the using services that they were extremely incompetent, and I certainly do not believe that they are, but in making a determination of what their needs were in a period of great flux and stress, with changing requirements imposed upon them from outside their own areas of responsibility it presents an extremely complicated picture. This Korea situation came out of the blue, as I believe you well know, and it was not the result of any planning, it dropped out almost overnight into the services' laps, and with a lack of planning there was a tremendous resulting confusion. That confusion was not only in the Corps of Engineers in our efforts to get forces in Korea to supply them, it was everywhere. In the case of programs of development for material, programs for the development of the Air Force, and even programs for the training of troops there was not time to think them out and have a program. You started off from scratch without a moment's warning as far as knowing what number might be needed as far as personnel goes.

General SEYBOLD. I agree quite definitely that the effect of it was seen all over. As General Hardin says, if there was a recurrence of it or a similar recurrence I think that probably it would happen again, because at a time like that the planner always has in mind that he is not going to have too little or too few. He is going to cover every contingency, no matter what. Of course, as we look back on it we realize that it was apparently unnecessary, but at the time no one knew, they were afraid of that contingency.

Whether any construction agency can hold the barrier against the policy and accumulated feelings at a time like that is a question, because, after all, we work for the owner.

Mr. RILEY. It would seem to me, though, that when they came up with this big construction program and asked for the money for it

that there should have been a most definite decision as to what they needed and where they were going to use it.

Mr. Davis.

Mr. DAVIS. Off the record.

(Discussion off the record.)

Mr. DAVIS. Let us go back on the record here for a minute.

With respect to failure to do a proper job of supervision of some of the projects for which the Corps of Engineers had responsibility, aside from the lack of numbers of personnel to do the job, can you recall instances of the failure of individual officers of the corps to live up to their responsibilities in the current construction program?

General SEYBOLD. I mentioned that two officers were reassigned. They were reassigned because the job grew in scope after they were assigned to the original job, and it was felt that the experience of these two individuals was not equal to the setting up and administering of the job as the additional work came on. Those are the only two cases.

Mr. DAVIS. For submission for this record at a later date will you furnish us with a statement giving us a little more of the detail of those cases, without identifying the names of the officers involved?

General SEYBOLD. All right.

(The Office of the Chief of Engineers subsequently supplied the following information:)

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., June 3, 1952.

Hon. JOHN J. RILEY,
House of Representatives.

DEAR MR. RILEY: In testimony before your subcommittee, Brigadier General Seybold, Assistant Chief of Engineers, mentioned two cases where the Corps of Engineers had effected reassignment of the supervising officers because the construction projects had expanded beyond their capabilities. He reported to me a conversation with you following the testimony in which he agreed to furnish some additional details. Because General Seybold has been appointed Governor of the Canal Zone and has been relieved from his local duties, I shall endeavor to supply those details hereafter together with a general account of other incidents of similar nature.

In the one case mentioned by General Seybold, a lieutenant colonel was assigned as engineer in charge of a base construction project for the Air Force, overseas. He reported early in June 1951 when a limited amount of funds had been allocated to the project. Since that time the job has become a $75,000,000 project and the officer was replaced in March of this year by another lieutenant colonel of considerably greater experience. The first officer was then assigned to another base construction project of much smaller dimensions.

In the other case mentioned by General Seybold, a lieutenant colonel was assigned early this year to replace a captain as area engineer in charge of a growing base construction job overseas. The original program of about $3,000,000 was suddenly increased to approximately $50,000,000 as a result of additional authorizations and appropriations. There are also projected increases for the future. The Chief of Engineers has now established an engineer district under the command of a full colonel with a complete staff. The lieutenant colonel is being retained in the district and is assigned duties appropriate to his grade and capabilities.

In addition to the instances enumerated above, a cursory review shows that the Chief of Engineers has relieved and replaced 13 other officers of senior grade in positions of great responsibility in the interest of efficiency and to strengthen the leadership necessary to the great demands of the construction program during the present emergency. One of these instances was in connection with the project in Northeast United States which has attracted the attention of your committee.

There are also instances involving the reassignment and replacement of junior officers, but many of these instances have not come to the direct attention of the Chief of Engineers because authority lay within the field offices to make these changes.

I am sure you understand that moving people around to fit them to the requirements of projects is not unusual in the construction industry.

If further information is desired on the above subject, I shall be glad to furnish it.

Sincerely yours,

G. J. NOLD,
Major General, Deputy Chief of Engineers.

Mr. RILEY. Gentlemen, we are very appreciative of this information. I believe that will just about wind up this particular phase of it.

(The Office of the Chief Engineer subsequently supplied the following data on the right to call engineer officers to active duty during a limited emergency:)

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, June 4, 1952.

Hon. JOHN J. RILEY,
Chairman, Subcommittee on Military Public Works,
House Committee on Appropriations, House of Representatives,
Washington, D. C.

DEAR MR. RILEY: In connection with the hearings of your subcommittee on the subject of military construction, you asked me informally for some data in respect to the total number of commissioned officers in the Corps of Engineers engaged in military construction.

The attached tabular data shows the distribution of officers on active duty April 1, 1952. The following are some of the points which can be developed from the attached tabulation:

(*a*) That while some 17 percent (277 of 1,619) of the officers under control of the Chief of Engineers are assigned directly to divisions and districts and performing military construction, actually 22 percent (349 of 1,619) are contributing directly to the military construction program being executed through the districts. A majority of officers on duty in the Office of the Chief of Engineers make a contribution toward military construction, since beyond the planning and direction aspects there are ancillary functions pertaining to personnel, legal, fiscal control and accounting, real estate, Inspector General, etc. All of these functions are essential to and support the direct activities of the military construction division of OCE.

(*b*) That the majority of all other officers under the control of the Chief of Engineers are contributing at least indirectly to the construction mission. Many are engaged in the formulation of policy and doctrine or in direct instruction of officers and enlisted men on construction subjects. Many are students in technical courses of instruction, in preparation for assignment to construction duties. (Several hundred officers carried as zone of interior and not under the control of the Chief of Engineers are temporary duty students at the Engineer Center.)

(*c*) That an undetermined number, but possibly up to one-third, of the 9,576 officers not under control of the Chief of Engineers are engaged in military construction other than that administered through the districts. These officers are with troops and on staffs. Almost 2,000 officers are engaged in Army and Air Force construction, or in direct support thereof, in Korea. Officers assigned to aviation engineer troops are also constructing operational airfields and appurtenant facilities in Alaska, England, and on the European Continent. Other thousands of officers are assigned to Army and aviation troops in training for the performance of operational construction.

(*d*) That several hundreds of engineer officers not under the control of the Chief of Engineers are engaged world wide at hundreds of military installations in the repair, maintenance, and improvement of those facilities. This program, known as repairs and utilities (R&U), is in fact a form of construction, and amounts to about half a billion dollars annually. Much of the program complements closely the construction performed through the districts.

The Chief of Engineers is short of officers to meet requirements in every major

field of assignment. For example, on the average only 60 percent of the required officers are available to engineer units in the zone of the interior.

I think the attached tabulation shows a reasonably good distribution under the rules and regulations upon which we must operate.

Sincerely yours,

J. R. HARDIN,
Brigadier General, Assistant Chief of Engineers for Military Construction.

Corps of Engineers strength data, distribution of officers on active duty Apr. 1, 1952

	Regular Army (1)	Reserve (2)	Total (3)
Active officers	1,806	9,389	11,195
I. Not under control of Chief of Engineers	1,272	8,304	9,576
Zone of interior	664	3,801	4,465
Far East Command	235	1,750	1,985
European Command	253	1,372	1,625
Other Overseas Theaters	49	371	420
Air Force, United States and overseas	71	1,010	1,081
II. Under control of Chief of Engineers	534	1,085	1,619
A. Activities not making a direct contribution to military construction program administered through districts:			
1. Boards and commissions	2	1	3
2. The Engineer Center:			
(*a*) School, staff and faculty	54	404	458
(*b*) Research and Development	12	14	26
(*c*) Replacement Training Center	31	146	177
(*d*) Students, 10-month advanced course	83		83
(*e*) Other Engineer Center	80	169	249
3. Army Map Service	7	61	68
4. Students, civil school	27		27
B. Activities making a direct contribution to military construction program administered through districts (officers making a direct contribution shown in parentheses):			
1. Office, Chief of Engineers	62	68	120
	(30)	(31)	(61)
2. Supply and procurement	20	86	106
	(2)	(9)	(11)
3. Divisions and districts	156	146	302
	(133)	(144)	(277)
Total officers making a direct contribution to military construction program	(165)	(184)	(349)

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, June 12, 1952.

Hon. JOHN J. RILEY,
Chairman, Subcommittee on Military Public Works,
House Committee on Appropriations, House of Representatives.

DEAR MR. RILEY: In response to the questions raised by your committee concerning personnel matters, I have prepared a resume of the personnel policies which have been in force in the present emergency, and the actions taken to obtain reserve officers for construction assignments.

The increased scope of the Army and Air Force construction programs has created many problems within the Corps of Engineers with regard to the personnel staffing of the various districts and divisions for proper supervision. In order to obtain the services of Reserve officers the following actions were taken:

(*a*) For the first few months after the outbreak of hostilities in Korea on June 25, 1950, the most compelling business of the Corps of Engineers, as of the armed services in general, was to effect an immediate build-up of the fighting strength in the Far East. An important part of this program was the requirement for the construction of new bases in offshore areas to the east of America. The first supplemental appropriation in October of 1950, and the second supplemental in January 1951, clearly established the outlines of the Nation's long-range policies and preparations. On December 29, 1950, the Chief of Engineers

requested authority to call 25 field-grade officers to active duty to support the military construction program. This request was approved on January 5, 1951, by the Assistant Chief of Staff, G–1, who further indicated that the Department of the Army was granting authority to call to active duty civilian component field grade officers as required within authorized position vacancies as indicated in personnel authorizations for June 30, 1951. Under this authority, 11 colonels, 25 lieutenant colonels, and 37 majors were ordered to extended active duty. While the majority of this group were assigned to military construction duties to meet urgently pressing requirements, many were not highly qualified for this type duty. The criteria established by the Department of Army for the selection of officers were:

(1) Preference to be given to officers who consent to be ordered to active duty.

(2) Preference to be given to officers who have served on active duty for at least 6 months in the grade now held in the Reserve or National Guard.

(3) Within the limits of the following table, preference to be given to the younger officers:

	Maximum age		Minimum age
	Combat arms	Others	
Major	44	48	30
Lieutenant colonel	48	53	35
Colonel	52	58	42

(4) As a general rule not over one-third of the officers recommended to be above the grade of major. The selection of colonels at this time to be only for the most pressing requirements.

(5) Nonvolunteer members of troop program units other than table of distribution augmentation units not to be ordered to active duty. Many highly qualified younger engineers and construction specialists were assigned to troop program units and thus not available.

(*b*) On March 7, 1951, the largest single program for recall of field grade Reserve officers was authorized. The grade breakdown as directed by the Department of the Army authorized 32 lieutenant colonels and 88 majors. No full colonels were authorized in this program. The selection of the officers for consideration was made by the military districts, the names forwarded through the armies for final approval by the Department of the Army. Although each Army engineer had been requested to assist the Assistant Chief of Staff, G–1, in assuring that sufficient numbers of qualified construction-type officers be included in their nominations, only 16 officers out of the 120 were considered qualified for construction duty and so utilized.

(*c*) Subsequent to September 1951, in order to support the military construction program, it was again necessary to initiate actions to order officers to duty under the provisions of the January 17 recall program. This resulted in the screening of over 400 field grade files of which 150 were selected for active duty. Of the 150 colonels, lieutenant colonels, and majors on whom action was taken, only 50 actually reported for duty. The balance were lost because of program restrictions and also a great number were physically disqualified. Some twenty-odd officers who had been granted deferments of various durations had their orders revoked on April 1, 1952, as a result of the rescission of this program.

(*d*) On March 28, 1952, Department of the Army suspended all programs for the ordering to active military service of reservists. Early in April, the Chief of Engineers initiated a letter to the Assistant Chief of Staff, G–1, requesting special authority to recall officers to active duty in support of the construction program as was granted the Medical Corps, the Chaplains Corps, and the Judge Advocate General's Corps. This request was not approved. Again on April 24, 1952, the Chief of Engineers submitted a request for authority in order to active duty 24 highly qualified construction field grade officers. G–1 granted this authority on April 28, 1952. Action was initiated immediately through the Reserve Branch, AGO, to determine the physical qualifications of these officers and to insure no delay in the subsequent issuance of their orders. These officers are now beginning to report for active duty. However, a request for personnel spaces to permit the assignment of these officers under the immediate jurisdiction of the Chief of Engineers was disapproved by the Assistant Chief of Staff, G–1, on June 4, 1952, and a request for reconsideration has been submitted.

(c) The company grade recall programs that were initiated along with these field grade programs authorized a total of approximately 3,800 company grade officers to be ordered to active duty. A total of approximately 3,700 company grade officers actually entered extended active duty. Of this number only a negligible quantity had had any construction experience. The vast majority entering active duty under this program were utilized in troop units. A total of 32 company grade officers have been placed in overseas construction projects.

Most civil service employees in the United States have been heavily engaged in Stateside work and relatively few of the more able upper bracket employees could be induced to travel abroad without dependents. Recruitment of civilians for civil service work in overseas areas has been difficult in that those willing to go overseas generally can obtain overseas work with a contractor at wages in excess of those paid by the Government. Thus, many of the jobs on overseas construction projects, which in the States would be held by civilians, have had to be accomplished in overseas projects by officers on active duty.

In general, the difficulties are those which can be expected in trying to carry out a vast mobilization level construction program using "peacetime level" personnel policies and competing with continuing large-scale civilian construction. The success of the program has been adversely affected by the individual attitudes of the officers sought. In 1940 and the years that followed, the most highly qualified engineers and construction men sought military service as the best way of contributing to the all-out effort. Today most of these same men believe they can contribute most to the national potential and the long range effort by remaining in their civilian capacities. Most of those desired for military service have important jobs and are naturally unwilling to exchange this known value of service for the uncertainties of military service. It is believed that the lack of spontaneous response to these calls for active military service reflects the failure of the public to appreciate the urgency of our defense preparations.

Sincerely yours,

JOHN R. HARDIN,
Brigadier General, United States Army, Assistant Chief of Engineers for Military Construction.

DEPARTMENT OF THE ARMY,
Washington, June 12, 1952.

Hon. JOHN J. RILEY,
Chairman, Subcommittee on Military Public Works,
House Committee on Appropriations, House of Representatives.

DEAR MR. RILEY: I write to supplement the information sent you June 12 by Brig. Gen. John R. Hardin concerning the personnel policies of the Corps of Engineers and the actions taken to obtain Reserve officers for construction assignments in the present emergency.

During the current emergency (declared December 16, 1950) the following statutory authority exists for the ordering of engineer officers of Reserve components and of the Army of the United States without component into the active military service for extended periods:

(*a*) Subsection 37a and section 38, National Defense Act, as amended (10 U. S. C. 369; 32 U. S. C. 81c) authorize the President to order to active duty for an indefinite period, with their consent, all officers of the Officers Reserve Corps and of the National Guard of the United States, respectively.

(*b*) Until July 1, 1953, section 21, Universal Military Training and Service Act (Public Law 599, 81st Cong.), as amended (Public Law 51, 82d Cong.), authorizes the President to order to active duty officers of the Reserve components for a period of 24 consecutive months with or without their consent. This statutory provision does not, by its terms, apply to officers of the Army of the United States, without component, and, by direction of the President, may not be used as authority to order individual members of the National Guard of the United States to active duty.

(*c*) Paragraph 7, subsection 127a, National Defense Act, as amended (10 U. S. C. 513), authorizes the ordering of officers of the Army of the United States, without component, who were appointed under that paragraph to active duty, without their consent, for a period of 24 months. All such appointments shall terminate, however, unless Congress affirmatively acts to extend them, on October 28, 1952.

(*d*) The act of June 26, 1936 (49 Stat. 1974; 10 U. S. C. 181a) authorizes the President to order to active duty, without their consent, for an indefinite period such number of officers of the Officers' Reserve Corps as may be necessary for the operational requirements imposed upon the Engineer Corps of the Regular Army, notwithstanding the limitations of subsection 37a of the National Defense Act, supra.

(*e*) Subsection 515 (d), Officer Personnel Act of 1947 (61 Stat. 501; 10 U. S. C. 506 (d)) authorizes the President to order officers of any Reserve component of the Army of the United States into the active military service, with their consent, for an indefinite period.

(*f*) Subsection 515 (e), Officer Personnel Act of 1947, supra, authorizes the President to appoint persons having no commissioned status in any component of the Army as temporary officers, and officers so appointed may be ordered into the active military service for an indefinite period pursuant to that same subsection.

I am advised that all nonregular engineer officers ordered to active duty since December 1950 have been so ordered under authority of section 21, Universal Military Training and Service Act, as amended.

I trust the foregoing information will prove sufficient to permit you to close and print the record of hearings before your subcommittee. If, however, there is need of further information, please do not hesitate to call upon me.

Sincerely yours,

F. SHACKELFORD, *Department Counselor.*

AFTERNOON SESSION

OPERATION OF CPFF CONTRACTS

Mr. RILEY. The committee will be in order. I shall ask Mr. Donnelly to proceed with his inquiry.

Mr. DONNELLY. Mr. Chairman, yesterday afternoon, when the committee recessed, it was considering the operation of CPFF contracts. The committee will probably recall that in the Navy hearings Admiral Jelley was quite frank in stating that a maintenance building should not have been constructed at Jacksonville, Fla., as part of a CPFF contract since it was susceptible to a separate award on a formal competitive bid basis.

The committee staff has come up with three instances where it appeared that a competitive-bid contract might have served just as well, and better, from the standpoint of the Government, than by doing the work under the main CPFF contract.

I have here the summary of the facts in these situations and ask that it be inserted in the record at this point.

Mr. RILEY. Without objection, it will be inserted in the record at this point.

(The matter referred to is as follows:)

NEW WORK IN COST-PLUS-FIXED-FEE CONTRACTS

The staff found that on some projects work was included under an active cost-plus-fixed-fee contract which was of such character that it should have been awarded by means of competitive bidding, thus obtaining the benefit of a competitive price. This applies mainly to new work for which the completion date allows sufficient time for the preparation of plans and specifications. This procedure will occasionally result in work under different contracts being carried on in the same area; however, most of the sites of cost-plus-fixed-fee contracts inspected cover large areas and no difficulties in this respect should occur.

An example is the $175,000 X-ray building at the Nebraska Ordnance Plant, Wahoo, Nebr. Although work under the main cost-plus-fixed-fee rehabilitation contract was nearly completed on September 17, 1951, it was planned to hold it open for the X-ray building although the completion and approval of the plans could not be expected for at least a month.

Other instances were noted, as, for example, the work listed below could have been performed under fixed-price contracts probably at a much lower cost:

	Type of work	Approximate cost
Cornhusker Ordnance Plant	New melt building, boiler house, boiler relocation, and pipe work.	$1,000,000
Sunflower Ordnance Plant	Production buildings, reconditioning of boiler plant	1,200,000

Mr. DONNELLY. Mr. Chairman, the corps does not quite agree with the possibility of the use of a formal contract in any one of these three circumstances and I believe General Hardin has some comments to make.

General HARDIN. Yes, Mr. Chairman, I would like to add these comments which we believe should be considered along with the report of the committee.

Take the Nebraska Ordnance plant first. These were the circumstances:

Firm design criteria for the X-ray facility prohibited completion of plans and specifications until October 25, 1951. Inasmuch as the facility was required by March 31, 1952, it was essential that the work be initiated through a CPFF contract concurrently with the completion of design. A lump-sum contract could not have been obtained before November 30, 1951. However, through utilization of a CPFF contract the X-ray installation was completed as of this date.

The project was substantially complete by the desired date of March 31, 1952; 31 percent completion was as of the date of November 30, 1951, which was the date we estimated it could have been advertised and awarded.

On the Cornhusker Ordnance plant, the comment we would like to offer is this:

The melt load line in this powder line was destroyed by fire several years ago and extensive investigations were required at the time rehabilitation was authorized to ascertain the condition of the connecting utilities.

In view of the urgency and limited time permissible for completion of this facility, it was necessary to make these investigations simultaneously with clearing of the site, mobilization of construction forces, and the initiation of design. For these reasons the facility was included in a general CPFF contract.

With respect to the Sunflower Ordnance works, the authorization for rehabilitation was given in October 1950. Climatic conditions made it vitally necessary to reactivate the steam-generating and distribution facilities at the earliest obtainable date in order to permit mechanical rehabilitation in the various manufacturing buildings. The original scope of work in the balance of the plant which is of temporary-type construction was based on a visual inspection and contemplated only the minimum repair and rehabilitation work necessary to permit operation.

Subsequently additional work and modifications not originally evident were found necessary due to concealed conditions and changes in manufacturing processes. Due to tight manufacturing schedules

and the character of the work all rehabilitaiton work was included under the CPFF contract.

However, wherever possible lump-sum subcontracts were let for specialty trades. Approximately 65 of such subcontracts were let. The new nitrogen fixation plant is covered by a negotiated lump-sum architect-engineering construction contract in the amount of $2,200,000 with the firm who developed the process.

Instances of Requests by Army for Exceeding Austerity Standards of Construction

Mr. Donnelly. Mr. Chairman, going into another subject matter, the subject of austerity in the construction operations of the armed services, particularly since Korea, at the request of the committee I have here a summary furnished by the office of the Secretary of the Army of instances where the commanding officers of field installations have requested that they be permitted to exceed the normal austerity standards. The notation that is shown here is that in each case the Department of the Army denied the request to exceed the austerity standards and I ask that this information be inserted in the record at this point.

Mr. Riley. Without objection, the matter will be inserted in the record at this point.

(The matter referred to is as follows:)

Instances of Requests to Exceed Austerity Standards, and Denial Thereof by Corps of Engineers and by Assistant Chief of Staff, G–4

1. Fort Monmouth, N. J.—Barracks

The Commanding General, First Army, by letter, File AHFOG 600.12, 13 August 1951, subject: "Criteria," requested that the barracks be designed to match the existing barracks at the installation, which have brick exterior, pitched roof and cornices. Assistant Chief of Staff, G–4, by letter dated 20 September 1951, file G4/C4 50410, Subject: "Construction Criteria," advised the Commanding General, First Army, that the austerity standards established by the Department of the Army, including concrete block exterior walls, dry wall construction, etc., applied to the Fort Monmouth construction program and would be adhered to in every respect to obtain the desired facility at a minimum cost.

2. Signal Corps R. and D. Laboratory, Fort Monmouth, N. J.

1. Comment No. 1 from OCE to G–4, File ENGEC, 21 December 1951, transmitted information that functional requirements of the Laboratory dictated the need for a stuctural steel frame with steel cellular floors, and that the foundations for the building would rest on piles.

2. Comment No. 2 from G–4 to OCE, 7 January 1952, with remark "Noted."

3. The using service requested the following:

(*a*) Brick exterior. OCE authorized concrete block.

(*b*) Battleship linoleum generally with terrazzo in laboratories, photographic sections, and publice spaces. OCE authorized asphalt tile generally, with ceramic tile elsewhere.

(*c*) Hauserman movable partitions with glazed panels along corridor. OCE authorized a more economical type of movable partition without glazed panels in corridors.

(*d*) Acoustical tile in laboratories and classrooms. OCE limited the use of acoustical title to only those areas where warranted by working conditions.

(*e*) Lecture and projection rooms to have sloping floors and be soundproof construction. OCE recommended level floors unless proper visibility cannot be obtained, and limited soundproofing to only those areas where this feature was functionally justifiable.

3. Fire Station, Decatur Signal Depot, Illinois

1. Comment No., file ENGEC, 17 December 1951, from OCE to G–4 referred to correspondence from the Chief Signal Officer in which it was requested that design of the facility be based on the use of an Air Force fire station which did not comply with Department of the Army standards. It was further requested that the building be faced with brick, and include a hose drying tower. The building was budgeted in the amount of $45,000 but, based on providing the necessary functional requirements was estimated to cost $80,000.

2. Comment No. 2, file G4/C4 77934, from G4 to OCE, 7 January 1952, recommended that design be suspended and the project reprogrammed for inclusion in a future construction program. When authorized, design would be developed in accordance with OCE sketch drawing.

4. QM Research and Development Laboratory, Natick, Mass.

1. Comment No. 3, file QMGRT 635 QM R. and D. Laboratory, from OQMG to G–4, 16 November 1951, requested authority to (1) use smooth-finish concrete walls in lieu of concrete block for exterior surface; (2) alternate in bidding documents to permit construction in excess of the 300,000 square feet authorized if favorable bids were received, and (3) permission to provide terrazzo in the entrance lobby of the Administration Building. Action was taken by OQMG because austerity standards of OCE directive would not permit their inclusion in basic design.

2. Comment No. 4, file G4/C4 73123, from G–4 to OQMG and OCE in turn, 30 November 1951, approved (1) and (3) and disapproved (2) of preceding paragraph.

3. The using service requested the following:

(*a*) Plaster on walls and ceilings of all toilet rooms above wainscot. OCE recommended glazed structural block wainscot with enameled block above and exposed concrete ceiling.

(*b*) Suspended acoustical ceiling throughout. OCE authorized their use only in areas where functionally justifiable.

(*c*) Asbestos board on furred walls, and partitions. OCE authorized gypsum board where functionally permissible.

(*d*) Parapets and stone copings. Deleted by OCE.

(*e*) OCE suggested that if suspended ceilings were omitted, reduced story heights should be considered.

(*f*) Underground electrical distribution system within a quadrangle formed by several buildings. OCE limited this to extension from poles to buildings.

(*g*) Interior doors 1¾ inches thick. OCE reduced to 1⅜ inches thick.

This data supplied by Office of Chief of Engineers.

DESCRIPTION OF AUSTERITY STANDARDS IN BARRACKS CONSTRUCTION

Mr. DONNELLY. Mr. Chairman, General Hardin yesterday afternoon furnished some pictures of barracks which show austerity in construction. This is the best photograph I have seen of the exposed beam and column at the end of the building, which is poured concrete. And then the siding is filled in with concrete block. These are barracks at Fort Campbell, Ky., and these photographs were taken on May 14, 1952.

General Hardin, would you mind describing these photographs briefly, since they embody the austerity standards in barracks construction?

General HARDIN. These are the new barracks at Fort Campbell, Ky. They are of 225-man capacity. The pictures were taken in May 1952.

These pictures show exterior and interior views and illustrate the type of construction which is our adopted standard for permanent barracks and permanent airmen's dormitories of 25-year-life quality.

The interior views of these Army barracks also indicate how the

squad rooms are divided by movable partitions, the nature of the construction in the lavatories and in the mess halls and kitchens.

Mr. DONNELLY. The chairman is looking at the front elevation of the barracks themselves. We note the projected-type window. As I understand, that is a very economical commercial grade of projected-type window; is that right?

General HARDIN. That is correct.

Mr. DONNELLY. With respect to this end of the building, I understand that the concrete block has been painted in this case; is that right?

General HARDIN. In that particular structure, I understand the block was painted. But our standards require rubbing into that block a grout which is a cement and water mixture, rubbing it in with a stiff-bristled brush to permeate the voids of the concrete block with this grout wash and, when it sets up, it provides a degree of waterproofing which is necessary for concrete-block construction.

In this particular project they did use some paint on the concrete surface, but it is not in keeping with our standards. We do not want them to use paint, and, at the moment, I have no explanation for its application here. We have not yet found a suitable paint; that is, a point which will serve the purpose of waterproofing and will also be durable on the concrete. Those paints that are now available, so far as we can determine, only pose a maintenance problem, if they are applied.

Mr. DONNELLY. We have here a view of the interior of the squad room. We note the concrete blocks for interior siding. Are the concrete blocks painted on the interior?

General HARDIN. Yes; that is a water-base paint.

Mr. DONNELLY. I note here the absence of any wainscoting of any kind on the interior finish of this squad room. I take it that there is no need for wainscoting of tile or any other substance?

General HARDIN. The only place where we put wainscoting is in the washroom facilities.

Mr. DONNELLY. General, what is the floor here? Is that just a finished concrete?

General HARDIN. Finished concrete.

Mr. DONNELLY. No asphalt tile or ceramic tile on top of it?

General HARDIN. No. I think it has a hardener in it, a dustproof hardener which means that it has to be a steel trowel finish, and then it becomes less susceptible to scuffing and the creation of dust.

Mr. Carey has a point to make about the northern zone here, some additional insulating effect. Will you state what that is, Mr. Carey?

Mr. CAREY. The exterior walls are furred and dry-wall construction is applied with a wainscot 3 feet high.

General HARDIN. What is the wainscot?

Mr. CAREY. It is either hard board or cement asbestos siding.

Mr. RILEY. Do you have anything above the wainscoting?

Mr. CAREY. It is wallboard painted.

Mr. RILEY. In other words, in the colder cliamtes it is sealed in?

Mr. CAREY. That is right.

General HARDIN. It seals an airspace in between the block and the inner wallboard. That airspace is a good insulator and increases the heat value of the structure.

Mr. RILEY. Those are reinforced cast beams, are they?

General HARDIN. They are reinforced; yes, sir. But those are not precast beams. They are poured in place. The joint structure you see there is the form joint. Do they ever use any precast beams, Mr. Carey?

Mr. CAREY. That is pan-type construction. The forms are prefabricated.

Mr. RILEY. You have practically a fireproof building when you get through with it, is that right?

General HARDIN. Yes, sir; thoroughly.

Mr. DONNELLY. In the face of that building there is a straight line; there are no projections at all?

General HARDIN. That is correct.

Mr. RILEY. If they would put a little grass and shrubbery in front of it, it would not be a bad-looking building.

General HARDIN. It is a very pleasing structure, I think. The only thing we have to do to sell people on it is to have them live with it for a while. It is a rather difficult thing for people who have been used to standard brick construction, colonial type, and that sort of thing, to accustom themselves to a more modern utilitarian construction.

SQUARE FOOT COST OF FORT CAMPBELL BUILDINGS

Mr. RILEY. Do we have the square foot cost of these Fort Campbell buildings?

General HARDIN. Mr. Chairman, my information would indicate that those buildings are part of a contract which was entered into in December 1951, a group of 34 buildings of 225-man capacity. The bids included utility work, which was about 7.1 percent of the bid. But the square foot cost adjusted to include allowances for all utilities and administrative cost—and that includes design—is $10.78 a square foot. That is the best price that we have obtained on a half a dozen barracks contracts and I think it is due, among other things, to the fact that this is the largest group of barracks that we have awarded in one contract. There were 34 buildings of this type at Fort Campbell.

In January there were 12 buildings of the same time awarded at Fort Eustis, Va., and at Fort Eustis, the work with a somewhat larger amount of utilities cost $10.83 a square foot.

The same type in smaller numbers at Fort Campbell, 165-man barracks, for eight buildings, in December 1951, the same time as the 34 contract, went for $11.52. That also included about the same percentage of utilities.

There again is demonstrated the economy in a larger undertaking at one time, but also economy in a structure housing more men.

Mr. DONNELLY. Mr. Chairman, I showed you these pictures of austerity on barracks construction first. Now we have in these additional photographs examples of nonaustere construction.

ELABORATE CONSTRUCTION AT CALIFORNIA INSTITUTE OF TECHNOLOGY, PASADENA, CALIF.

This building was built in the spring of 1951. This cafeteria cost $100,000 and it was very elaborately done. It was at the California Institute of Technology at Pasadena, Calif., operated for Army Ordnance.

The contract for the cafeteria and other structures was for $228,-817. This cafeteria is small but ultra-modern. It is entered through a pair of $700 plate glass doors set in bronze frames; has a circular snack bar with pedestal-type leatherette seats and an outdoor dining terrace with a staff dining room, in addition to the usual cafeteria serving line and dining space. Stainless steel, a critical material, is used to the fullest extent possible. Architectural details are costly and include such items as rubber tile flooring, cast bronze hardware, metal-clad exterior doors and frames, recessed metal hose cabinets with glass doors, special millwork, brick planting boxes and an ornamental iron railing on the terrace.

I might say in mitigation of this, if there is any mitigation, that the residents of Pasadena did not want Army Ordnance to put this in here. They had been objecting continually to the type of experimental work being conducted there by Army Ordnance and, as a matter of fact, they had a citizens committee which got up considerable opposition to any continuation of this sort of thing out there. A part of the elaborateness of this was to mollify the citizens who live in the community. But, on the other hand, as our people went through the files out there, in the Los Angeles District Office of the Corps of Engineers, it got down to an Alphonse and Gaston proposition. The district engineer said to Army Ordnance, "Well, if there is any failure to conform to austerity, it is your fault," and Army Ordnance said to the Corps of Engineers, "If there is any failure, it is your fault, because you are the construction service."

So, some of these things could have been combed out, from the viewpoint of the staff, and they would still have had something there that would not have offended the people in the community too much.

Separate from that, we have this engineering building in the same location which cost $261,800.

Mr. RILEY. I do not see any other buildings particularly close to this one.

(Discussion off the record.)

Mr. DAVIS. General, were these buildings designed by private architects hired by the Corps of Engineers?

General HARDIN. Yes, sir. They were also designed in 1950 before the present austerity standards were in effect.

Mr. DAVIS. Were those architects paid on a percentage basis?

General HARDIN. Not directly. The architect-engineer contract is based upon a fee, and that fee, of course, takes into consideration the over-all estimated cost of doing the work, which is measured, in some respect, by the cost of the work. I mean by that that we use a procedure of computing the fee which is based upon the estimated cost of the completed work. Even before it is designed you have to make some rough estimate of what the completed structure will cost, and then there are other considerations that go into the determination of the fee such as the degree of difficulty of design. If it is an adaptation of a standard plan his fee is much less than if he has to do original work. If the complexity of the thing is above normal or below normal his fee is influenced by that.

We have recently, after much discussion with the Association of Architects, adopted a procedure whereby the three services, the Navy, Air, and the Army, in contracting for achitectural services will use agreed upon curves which are based upon the completed cost of a

project, it being a higher percentage as a fee for the small undertakings than it would be for a very large undertaking.

Then, there are different curves for different degrees of complexity and different types of work. So, his fee is not based upon a cost-plus procedure. It is a fee which is predetermined before the work is undertaken.

Mr. DAVIS. It would be determined, then, on the basis of the engineer's estimate of the cost in each case?

General HARDIN. That is correct, that is the predominant consideration. Now, the engineer cost of the undertaking also comes into the matter by estimating what it would cost a man to do this work. We make an estimate before we agree on the fee as to what it would cost us if we attempted to do the design, a fair and reasonable cost of the contractor. That is checked against this graphical fee curve.

SUPERVISION OVER ARCHITECT-ENGINEER FIRMS TO MAINTAIN ECONOMICAL DESIGNS

Mr. DAVIS. What do you do to combat the very natural human desire of the architect to add those extra frills that will make it look better, to swell his pride, so that when he goes by there he will say well, I designed that building, is it not a pretty thing?

General HARDIN. Mr. Davis, you sound like you have had some experience along that line.

Mr. RILEY. Off the record.

(Discussion off the record.)

General HARDIN. I assure you it is a very real problem to any using service that hires architect-engineer firms, and that is one of the things that we have to give our supervision to. It would be so simple if we could just go out in the market and deal with a competent engineering firm, and say we want you to do this and forget the whole thing, bring in the completed job, and that is it, but too many cases of excesses would result from that sort of thing. We turn over to the architects our engineering manual, and we endeavor to educate them in the Government ways of doing business. That is part of the instruction that they receive before they begin this work, but even so, it requires constant liaison between our nucleus, our organization and our engineers to supervise the contractor's performance and prevent, as best we can, those things from getting into it. Off the record.

(Discussion off the record.)

Mr. DAVIS. Returning to the record, besides the very obvious control of simply insisting that the design be in accordance with economic standards before the architects are paid, you do attempt to maintain supervision through the examination of the designs by officers of the corps while the actual design work is in progress, is that correct?

General HARDIN. It is not limited to officers of the corps, but our designers and civilian engineers. They are in constant contact with the architects during the preparation of their work. I do not say every hour of the day, but frequent contact, reviewing plans before they are completed so that when they are completed they will not have to suffer unnecessary changes.

Mr. DAVIS. Have there been instances, in your recollection, since Korea where you have simply had to turn down the designs of the architect and say, "This is too fancy, do it over"?

General HARDIN. Not to do it over, but we have in innumerable instances required the architect-engineer to change the plans before they were put out for bids.

Mr. DAVIS. That was after the plans, at least insofar as the architect felt they were completed, had been completed?

General HARDIN. Yes, sir. My remark about innumerable instances would not apply to that stage of the plans, because we endeavor to keep them from reaching that state of completion until they are satisfactory, but even so I can recall several instances where the plans were completed as far as the architect was concerned, and had to be revised to eliminate embellishments or things which are not in keeping with our criteria, which were cut on the final review, and not cut prior to the final review of the plans.

METHOD OF SELECTING ARCHITECT ENGINEERS

Mr. DAVIS. The employment of the architect-engineer in all cases where the Corps of Engineers is the constructing service is a matter for decision by the corps, is it?

General HARDIN. Yes, sir.

Mr. DAVIS. Your policy, in general, is to attempt to obtain the services of local architects?

General HARDIN. That is correct, if they are qualified and not otherwise unduly engaged in work which would result in delay, we select from the area in which the job is located, the qualified talents.

Mr. DAVIS. As a practical matter, do you attempt to maintain an informal directory of competent architects in each district?

General HARDIN. Yes, sir, each echelon of our organization maintains a file of the qualifications of the architect-engineers and builders upon whom they might have reason to call. Some of those architect-engineers have been selected for classified work and given clearance through intelligence channels, but if it is unclassified work, then the area in which the job is located is the first consideration and our files are kept up to date with the brochures and the experience and qualifications sheets of the architect-engineers, and we urge them to keep us informed of the status of their organization with respect to workload and availability, so that we are always in possession of facts concerning them, and we also urge our architect-engineers to make know their availability to us, and we seek them out through the associations to which they belong, like the Association of American Architects, and the associations of different types of engineers.

Mr. DAVIS. Your fees being, to a large extent, standardized, the practical procedure then is simply that the representatives, for example, of the district engineer's office would decide well, this is about what we ought to pay an architect for doing this job and then they will go and call an architect and say are you able and willing to do the job for about this fee? Is that what you do, or is there something that would be open to bid with respect to the architect's job?

General HARDIN. No, sir, we religiously avoid that element of bidding, because we consider it a professional service just like a lawyer or a doctor, and for that reason we have a standard procedure which requires the district engineer to select from a list of qualified firms a minimum of three and to consider the three as his potential associ-

ates. Then he takes number one of his preference, and that preference has to be based upon various factors of professional ability and the workload a man has, and we are trying to spread the workload of this defense effort, and he ends up in putting these three on a relative basis of priority, they may all be equally competent professionally.

Then he approaches the first firm, the firm representatives—they are brought in in person, not relying on written communications alone, and they discuss the matter, pointing out, first of all, to the firm that there is a job to be done and what its nature is, and telling them what the requirements are in time, and give them a thorough understanding of what their problem is. That is a preliminary step, and then they ask them if they are interested. If they are, they are asked to go away and consider the problem. They give them what plans are available or criteria, and then at a certain time another meeting is arranged and at that meeting the matter of price is discussed. We never disclose to them what we think the job is worth. We obtain from them what they think the job is worth. If we do not believe they understand the job, we may say, "Well, a discussion of what goes into your concept of this expense may be helpful, and if you will explain to us why you think it costs so much, we may be able to have a meeting of the minds." We keep in mind what we think the job is worth. If we cannot get together with them, then we go to No. 2, and so forth.

FIELD EXAMINATION OF PROJECTS TO EFFECT ECONOMIES IN CONSTRUCTION

Mr. DONNELLY. General Hardin, based largely on the hearings held by this committee in hearing representatives of the Bureau of Yards and Docks, Admiral Jelley, in order to cope with this very problem has set up a procedure whereby two captains out of his office make periodic trips to all of the naval districts with authority to comb through plans and specifications drawn up by architect-engineer firms or by anybody else and to endeavor to effect economies in the plans and specifications from a construction standpoint. Admiral Jelley advised the committee here recently that he will furnish a statement of the eliminations of construction costs which have been occasioned by these regular trips of his two captains. I wonder if the Chief of Engineers has any comparable system set up within the corps.

General HARDIN. Since we are not a centralized organization such as the Bureau of Yards and Docks is, I do not believe I can answer your question in the affirmative, but I believe we do have something approaching it.

Our staff is organized on the basis of part time in the office and part time in the field, and both our engineers and our construction men are in contact quite frequently with our field operations. During those field visits, of course, it is their primary purpose to see the progress that is being made and the methods that are being used. However, in the reviewing of architect-engineers' efforts in order to arrive at standard plans we have done this, we have caused the field to submit to us all the plans which they prepare. Those plans are given some review as quickly as they come in in order to see whether adherence is being given to the policies and criteria, without a detailed checking of the structural strengths or anything approaching it.

Out of that submission to the Office of the Chief of Engineers of these various architect-engineer efforts through our several divisions we have come up with certain accepted plans to be utilized as standards throughout the corps, and that pamphlet that I gave you yesterday is a part of that effort. We are going much further than that pamphlet represents, and at the present time in association with the Air Force architects and engineers there is a project called Snowball. Why they gave it the name "Snowball" I am unable to answer, but "Snowball" is an operation which is based upon a culling of these various plans that have been prepared for Air Force operations and a further agreement on the part of the Corps of Engineers and the Air Force engineers as to the acceptability of that particular plan which seems to suit their purpose best for an administration building, or whatever it may be, and they will also receive the same kind of treatment which that pamphlet has given those already accepted. It will broaden the base.

I do not know whether that answers your question. It was a rather tortuous approach to the answer, but I cannot think of anything more comparable to what the Bureau of Yards and Docks is doing.

Mr. DONNELLY. I think your premise was that the Navy had decentralized.

General HARDIN. No; they are centralized to a greater degree than we are.

Mr. DONNELLY. As it turned out in the hearings on the Navy, the plans and specifications had been left in a decentralized status with only a spot check of some of them here in Washington by the Chief of the Bureau of Yards and Docks, and the system is now set up so that all plans and specifications will be combed by a direct representative of the Chief of the Bureau of Yards and Docks before anything is done with them by way of construction.

General Hardin, you have testified in the past with respect to the tendency upon the part of the using services to desire brick veneer on their buildings, and you have indicated that the feeling of the corps is that it is not necessary to have brick veneer to have a permanent building and at the same time an attractive building.

CAMP DETRICK, MD.

Mr. Chairman, I offer for the record at this time a statement of the situation at Camp Detrick, Md., and I ask that this statement be incorporated in the record at this point.

Mr. RILEY. Without objection it may be incorporated in the record at this point.

(The matter referred to is as follows:)

USE OF BRICK EXTERIOR WALLS AT CAMP DETRICK, MD.

In many cases brick is used in exterior walls for the sake of appearance, although less expensive construction could have been used. At Camp Detrick, Md., where an industrial-type laboratory operation is being carried on, new buildings costing about $10,000,000 are under construction which have brick veneer exterior walls. Even the boilerhouse is being built with brick walls. Under the new specifications currently in force, all buildings at Camp Detrick financed with fiscal year 1952 funds will have concrete exterior walls, which are much less costly.

COMPARISON OF CHANGES OF PLANS FOR CONSTRUCTION BY AIR FORCE AND ARMY

Mr. FURCOLO. I want to ask you one general over-all question. As far as Air Force construction is concerned it seemed to me that they were apt to move around a great deal more than the Army, and that they were apt to have more changes in their entire system. I do not know whether that also applies to the Army or not. Does it, do you know?

General HARDIN. I would say that in a broad measure there have been many more changes in the Air Force construction-program requirements, criteria, and siting arrangements than we have been faced with in the Army. Now, there is some reason for that.

Mr. FURCOLO. What I was getting at was when we discussed the Air Force situation we got into a great many of the changes causing short-term, long-term, and semipermanent construction. We also saw situations many times where, because of changes in the type of aircraft, very often fields had to be physically moved from one location to another. I would assume that you do not have to be on the alert as much in connection with the Army for things like that. I do not know whether my assumption is well grounded or not.

General HARDIN. I think your assumption is well grounded. The Army had a system of planning which, I think, resulted in less uncertainty at the time Korea came on.

For a number of years the Army had a plan, we had been charged with part of the responsibility is the reason I know something about it, for preparing master plans for the various Army stations, plans which would be put into effect on mobilization, partial mobilization, and what not, depending upon the different concepts of readiness. It was not difficult with that background of broad planning to determine the Army requirements, and as a consequence our effort went, I think, much more smoothly in the Army than in the Air Force which had to change their whole concept. Although they endeavored to prepare plans for utilization of different stations their basic structure was much in a state of flux so that what they might determine was a station for today would not be in keeping several months from now.

Mr. FURCOLO. That is all.

Mr. DONNELLY. Mr. Furcolo, just to be certain that the Army is not put in a different position than, for example, the Air Force on barracks, I have here the development of the Army barracks criteria, and they paid an architect-engineer to draw up standard barracks designs for 225 enlisted men, and this design was approved February 28, 1951. I do not think adequate planning attention had been given to such standard structures as barracks, in my understanding.

General HARDIN. By whom?

Mr. DONNELLY. The Army or the Air Force, either one prior to Korea.

Mr. FURCOLO. Let me clarify this first of all, if I may. I had gathered from your answer that, in general, we would expect to find a better record of construction from the Army because there would be less excuse for the Army due to the completeness of the plans you have mentioned. In other words, I want to know if my general approach is right on that, that we would be entitled to expect that the

final product of the Army would be arrived at a good deal more smoothly because of what you just said?

General HARDIN. I think that is a justified conclusion, but I would like to make it clear that the Army had two problems, one of which was relatively simple in its solution, and that is the designs of barracks, warehouses, and camp and post type of facilities, but the Army had another problem that was about on a par with the Air Force in these industrial facilities, which is the business of making powder, munitions, and tanks and things which require industrial facilities to produce.

Mr. FURCOLO. I see.

Mr. DONNELLY. Off the record.

(Discussion off the record.)

CAMP RUCKER, ALA.

VOLUNTARY REFUND BY CONTRACTOR

Mr. DONNELLY. The next matter has to do with the rehabilitation of Camp Rucker, Ala., and this is a negotiated contract where the contractor voluntarily returned $450,000 to the Corps of Engineers at the conclusion of the contract.

I ask that this summary be included in the record at this point, Mr. Chairman.

Mr. RILEY. Without objection, it will be made a part of the record.

(The summary referred to is as follows:)

CAMP RUCKER, OZARK, ALA.

REHABILITATION OF ARMY CAMP

This camp was built in 1942 of temporary construction and allowed to deteriorate after being vacated in 1946. It was rehabilitated on instructions in July 1951 from the post commander. The district engineer was authorized to negotiate lump-sum contracts based on unit prices.

According to a representative of the mobile district engineer's office, construction was not orderly because of the hurry to place the work under contract. About August 1, the post commander called on the district engineer to undertake the rehabilitation work. Surveys of the extent of work and cost thereof disclosed a lack of sufficient funds. Quotations were invited from contractors on unit-price basis so as to award as much work as funds would permit. The first phase of rehabilitation work involved some 300 buildings. Contractors were allowed 4 days in which to prepare and submit proposals which were received on August 21, 1950, and contract No. Eng. 561 was immediately awarded. The contractor's original proposal was $2,718,212. Negotiations reduced the scope of work to funds available and the contract was awarded in the amount of $1,593,252. Subsequent thereto the omitted work was reinstated as funds became available. The ultimate revised contract amounted to $2,737,425, which included extra work aggregating $1,144,174. This contract proved to be inordinately profitable to the contractor for, upon completion of the work, the contractor voluntarily returned $450,000 to the Corps of Engineers.

Mr. DONNELLY. This summary was submitted to the Corps of Engineers, and the staff was advised that the story is factual and that the Corps of Engineers desire to comment on the situation.

General HARDIN. This is the comment we would like to make, Mr. Chairman:

The commanding officer at Camp Rucker provided funds on the 18th of August 1950 to the Mobile district engineer, Mobile, Ala., for rehabilitation of facilities. Forty invitations were sent out and seven quotations were opened August 21, 1950, for rehabilitation of roads and buildings. The contract was negotiated with the Anderson, Black

& Green firm for the rehabilitation of approximately 1,062 buildings at the negotiated price of $1,593,251.50. Five modifications for additional work were made, bringing the contract price to $2,737,425.44. This contract contained a renegotiation clause and, in fact, the contract is now being renegotiated by the Renegotiation Board.

However, the contractor, before accepting payment on the final voucher, voluntarily reduced the contract payment by approximately $465,000 to a final payment of $2,271,644.31.

The cost estimate as the basis for negotiating the contract between the Government and the contractor was prepared following a hurried examination of the rehabilitation work required, and for this reason some of the contingencies covered unforeseen conditions. The cost estimate also contemplated the use of considerable overtime work, as it was considered at the time the negotiation was made that this was an urgent matter to be accomplished with dispatch.

As the work progressed and the buildings were actually uncovered for determination of the rehabilitation work required, it developed that the work required was not as extensive as originally contemplated and also that the overtime work contemplated at the time of negotiation did not materialize.

The full refund, with the concurrence of the contractor, will be taken out when the contract is renegotiated.

I might supplement this by just making this observation: In these rather extensive rehabilitation programs that we are faced with performing for the Army and the Air Force, in certain sections of the country we have found a willingness on the part of contractors to accept the work on a negotiated basis—that is to say a lump-sum or unit-price basis. In other areas where the urgency was extreme contractors would not accept them on any other basis than cost plus a fixed fee. We are again reverting to the preference. We endeavor to put as much of this work on a unit-price or lump-sum basis as we can, and we are quite successful in some regions of the South in getting contractors to do this rehabilitation work by other than a cost-plus-a-fixed-fee method.

Of course, under the present Procurement Act, renegotiation becomes a part of the contractual relationship. While it is not a guarantee that the Government will recover anything, there is a good expectation that it will.

(Discussion off the record.)

Pasco Engineering Depot, Wash.

Mr. Riley. Will you take up the next item, Mr. Donnelly?

Mr. Donnelly. Mr. Chairman, the next item to which I would like to invite the committee's attention is a further example of the obligation of funds in a very hasty manner where, at Walla Walla district of the Corps of Engineers in June 1951, during the course of the Air Force hearings, the committee considered the hasty negotiation of a very sizable contract at Fairchild Base, in the amount of $1,934,000, and also other work at the Geiger Air Force Base in the State of Washington, the Geiger job involving $313,661.

The negotiation on Geiger was between June 2 and 26, 1951, and in both cases of Fairchild and Geiger the representatives of the district engineer were working night and day preparing plans and specifications and attending conferences, and were back in the morning at 7 o'clock at the office.

Here we have still a further illustration of the same thing at the same district engineer's office.

I offer for the record, Mr. Chairman, the summary of the situation in the Pasco engineering district, which is an Army operation.

Mr. RILEY. Without objection, it will be included in the record at this point.

(The statement referred to is as follows:)

PASCO ENGINEERING DEPOT, WASH.

The Walla Walla district of the corps was informally advised on June 4, 1951 (formal advice dated June 28, 1951), that approximately $1,500,000 was being made available for additional rehabilitation work at this depot and that such work would be financed by repair and utility funds necessitating the award of contracts before June 30, 1951. The scope of this work was received on June 8, 1951, and included the rehabilitation of railroad tracks, roads, warehouses, and the installation of sprinkler systems in warehouses.

Thereafter it was decided to place this work under contract by soliciting proposals from selected contractors. Conferences were arranged with the selected contractors who met with corps representatives on June 19 and 21 to view the work and discuss the plans and specifications.

In order to show the speed with which events took place after the receipt of the scope of this work on June 8, 1951, the following tabulation is set forth:

Type of work	Specifications completed but not checked	Conference with contractor	Contract awarded	Contract amount
Sprinkler	June 14	June 21	June 29	$327,775.00
Streets	June 15	June 19	June 26	106,403.00
Buildings	June 17	June 21	June 28	519,531.50
Railroads	June 16	June 19	June 26	176,322.00
Total				1,130,031.50

PEAKING OF OBLIGATIONS

General HARDIN. Mr. Chairman, this is a factual report. I think it is only a repetition of the things we were involved in at the end of the fiscal year, last year, in many cases for the Army and some cases, as you may remember, for the Air Force, and it demonstrates to my mind the improper procedure in making funds available. This creates a tendency to do this sort of thing at the end of the fiscal year where funds expire if they are not used. This is purely a case of that.

I think the district engineer again entered into that effort with enthusiasm and willingness to help, which is beyond reason to demand of an organization.

Again I would like to point out that we are a service organization and the degree of our performance for the people that we are serving is the basis upon which we are judged.

Here was a case where the Army did not produce the money for us to use in providing rehabilitation work for them until the very close of the end of the fiscal year. And the same thing is developing this year, I might add. It is beginning to make its appearance. They are telling us in advance that they want to use these funds, to get them obligated, before the end of the fiscal year. Having in mind the attitude of the committee on this sort of thing, we are becoming more and more resistant to it, even at the risk of having the funds revoked. I do not think there is so much inclination to comply, but on the other hand I do suggest that there should be a new look taken at this pro-

cedure. I can think of nothing less efficient than to impose upon a governmental construction agency the use of "year" money—and it seems to me it is only reasonable that some proportion of these funds that are appropriated for maintenance and operation at the very least should be considered expendable in the next fiscal year.

There are so many variables that cause this to be necessary, and to say that if funds are not obligated they are lost at the end of the year is only an invitation, in my opinion, to an inefficient use of them.

I believe there are instances where some proportion of the funds appropriated to a Government agency are allowed to be obligated in the following year—maybe 20 percent or what not—rather than saying they are all good until they are completely used, as for new construction money. But this maintenance and operations money is in effect largely construction money; it is just not new construction. This is money that is available at the end of the year and is for keeping the buildings in repair, a proper state of repair, and for making authorized minor additions to the structures, repairs to roofs, making changes in a heating plant to make it more economical or get more economical use out of the fuel. All of those things enter into the picture, and to a considerable degree they are truly construction funds.

Mr. RILEY. In the construction and repair periods where you get the most benefit, usually they run roughly from about the 1st of April to the 1st of November.

General HARDIN. Yes.

Mr. RILEY. So that if you have money that reverts to the Treasury on June 30, really you only have about 3 months to use it—in some instances, at least. In the South we realize we have a greater construction period, a little longer, but I would say that you could not get the maximum efficiency in a great many other areas before the 1st of April.

General HARDIN. That is very true. You will find it is impossible to do painting before that because of the temperature and the humidity, which are such that if you do paint you are really just throwing money away.

Mr. RILEY. I think some provision should be made on this. In the case of money that is to revert to the Treasury, there ought to be some process by which, if it is needed, it can either be reappropriated or there ought to be a continuation of the construction period so that it could be used judiciously to avoid this temptation to rush everything and not do a good job.

General HARDIN. I assure you it would make our burden a lot less if that could be done.

Mr. DONNELLY. General, there is another factor in this picture. The Armed Services Procurement Act and regulations thereto provide that before the contracting officer may negotiate a contract or make a competitive-bid contract he must make certain findings of fact.

General HARDIN. Yes.

Mr. DONNELLY. We seem to run into situations in the field where the only real finding of fact the contracting officer could make to justify the use of negotiated contracts was June 30; so he would go ahead with the negotiated contract, and sometime in July he would sit down and make up some finding of fact to bring him within the framework of the law. I think that is another factor in this problem of year-end funds.

General HARDIN. It would be in this respect, Mr. Donnelly. We require each time there is a negotiated contract undertaken, either by lump-sum unit price or cost-plus-a-fixed-fee procedure, to write up the findings of fact and make them a part of the record. It is a rather tedious thing for them, and I know that in these periods of getting something done in a hurry they are likely to make some notes or keep it all in their heads and commit themselves to a procedure and finalize the paper work at a later time. It is not supposed to be done that way.

(Discussion off the record.)

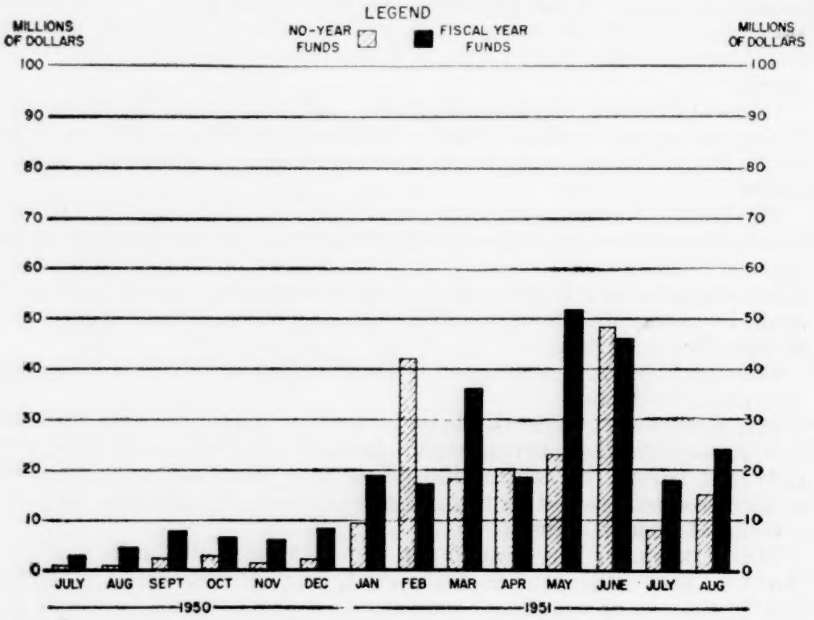
OBLIGATION OF FUNDS BY CORPS OF ENGINEERS

Mr. DONNELLY. Mr. Chairman, we have had charts showing the obligation of funds for both the Navy and the Air Force. To round out the record I think it would be appropriate to include in the record at this point two charts. One shows the obligation of funds of the Department of the Army by the Corps of Engineers for the 14-month period ending August 31, 1951; and the second chart would be this one, which I have in my hand, which shows the performance for the two prior fiscal years, fiscal years 1949 and 1950.

MILITARY CONSTRUCTION-ZONE OF INTERIOR
(INCLUDING REPAIR AND UTILITIES FUNDS)*

FUNDS OF DEPARTMENT OF ARMY
OBLIGATED BY CORPS OF ENGINEERS

FOURTEEN MONTH PERIOD ENDED AUGUST 31, 1951



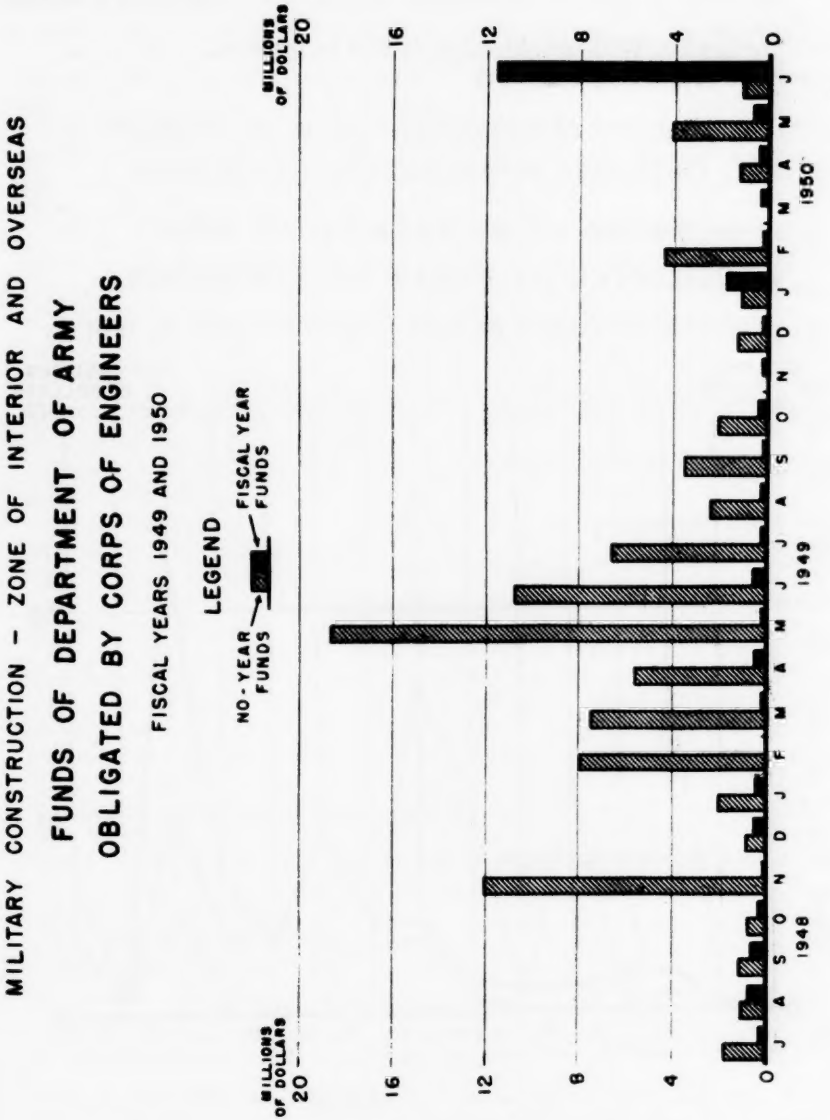
*DATA INCLUDED FOR REPAIRS AND UTILITIES REFLECT COSTS RATHER THAN OBLIGATIONS. R&U FUNDS ARE OBLIGATED BY CORPS OF ENGINEERS ONLY UPON REQUEST OF THE CONTINENTAL ARMY COMMANDERS. THESE OBLIGATIONS REPRESENT A RELATIVELY SMALL PROPORTION OF THE R & U FUNDS.

Again, we have the cross-hatched bar, which is no-year funds; and the solid black bar, which is the year-end funds.

May these be inserted in the record at this point, sir?

Mr. RILEY. Without objection they will be inserted in the record.

(The documents are as follows:)



OBLIGATIONS UNDER VARIOUS TYPES OF CONTROLS BY CORPS OF ENGINEERS

Mr. DONNELLY. Mr. Chairman, another chart which the staff has had prepared will give a very illuminating insight into the use of

cost-plus-fixed-fee contracts by the Department of the Army. You find the dotted line is the cost-plus-fixed-fee contracts awarded for the 14-month period ending August 31, 1951. The heavy solid bar is the formal competitive-bid advertised contract. The one with the broken bar dot is the negotiated contract. That is the negotiated lump sum.

May this graph, Mr. Chairman, be inserted in the record at this point.

Mr. RILEY. Without objection, it will be inserted.

(The graph is as follows:)

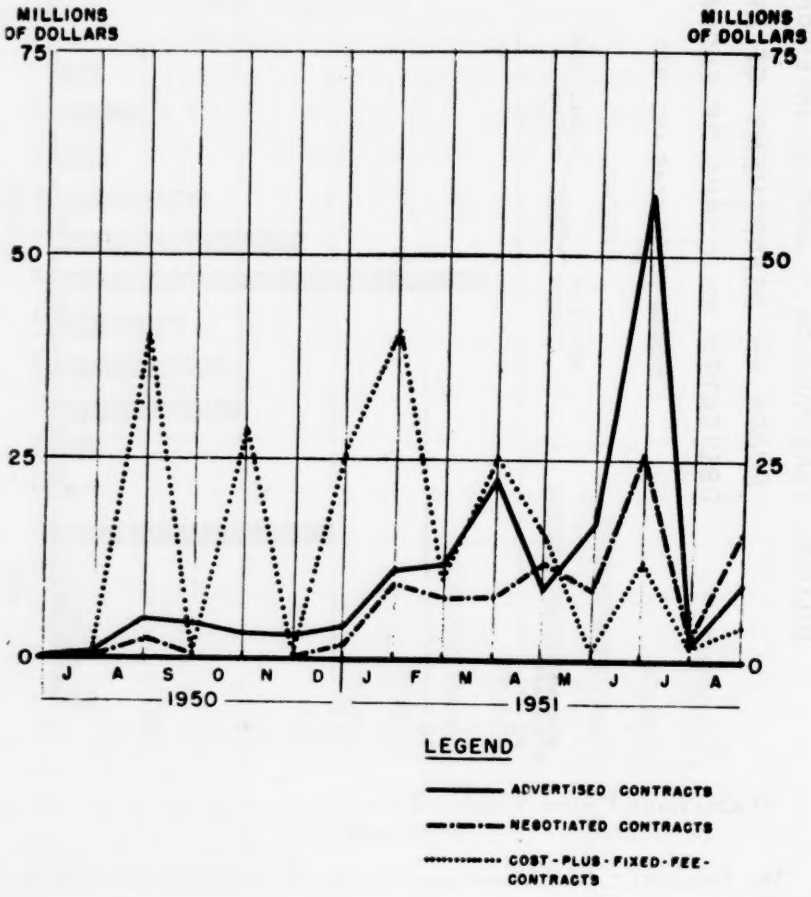
MILITARY CONSTRUCTION - ZONE OF INTERIOR

(INCLUDING REPAIR AND UTILITIES FUNDS)

FUNDS OF DEPARTMENT OF ARMY

OBLIGATED BY CORPS OF ENGINEERS

FOURTEEN-MONTH PERIOD ENDED AUGUST 31 1951



General HARDIN. Mr. Chairman, in connection with the last chart which Mr. Donnelly has presented to the committee, I have some statistical data here as to what led to these cost-plus-fixed-fee operations in this peaking nature, as demonstrated by the chart on the dotted line. If it would serve any purpose of the committee, I would be glad to make it available.

Mr. RILEY. We would like to have your comments on it; yes, sir.

General HARDIN. In early 1950, August, which is the first peak, there is a CPFF undertaking referred to as the BDM project, which is an undertaking for the Chemical Corps.

There is another one in October 1950, a very large amount, indicated by the graph, for work for the Chemical Corps on another development project. They are both classified. I presume you know something about them.

Then in December 1950, there was another peaking of these undertakings, and there were seven for the Ordnance, totaling $26 million.

In January 1951, there was another series of undertakings for the Ordnance, including some work for the Chemical Corps.

For all industrial operations, eight undertakings, the total is $40 million more.

Then in February 1951, there were a total of four undertakings, some for the Signal Corps this time, but mainly for the Ordnance, in the amount of about $9.8 million.

There in March 1951, there was another amount of $24.9 million in seven undertakings, all of which were for the Ordnance.

So it will be noted that a majority of the above contracts are for Ordnance and Chemical Corps industrial-type projects. Some of them are of a very advanced development nature.

As we have discussed before, in our opinion many of them were necessary to be undertaken in this fashion to get them going at all.

Mr. RILEY. What would be the explanation there of the negotiated contracts, which seem to have gone up to a peak about June of 1951?

General HARDIN. That was in the effort to place certain undertakings for the Air Force largely under way as soon as possible. Also, I think there are some Army undertakings in there, too; but primarily it was for the Air Force. Negotiated procedures were generally used on rehabilitation jobs, which could be undertaken by contractors in that form, in preference to cost-plus-fixed-fee operations, but there were a good many negotiated jobs undertaken to save the bidding time.

Mr. RILEY. Mr. Furcolo, do you have any questions on this?

Mr. FURCOLO. No.

Mr. RILEY. Mr. Davis?

Mr. DAVIS. No questions.

ENGINEERING DEPOT, GRANITE CITY, ILL.

SHORT BID PERIOD BECAUSE OF TIME LIMITATION ON DRAWING PLANS AND SPECIFICATIONS

Mr. DONNELLY. Mr. Chairman, I have here an illustration of a short bid period necessitated by a very severe time limitation in drawing plans and specifications and going through the orderly and normal procedure of awarding a contract. It has to do with the engineering depot at Granite City, Ill.; and I ask that this be inserted in the record at this point.

Mr. RILEY. Without objection it will be inserted.

(The document is as follows:)

ENGINEERING DEPOT AT GRANITE CITY, ILL.

The primary purpose of soliciting bids and proposals is to get the best obtainable bid or proposal through sharp competition. This purpose is defeated by inadequate bidding time. Contractors often, due to the time limitation, are unable to secure the best price for materials or secure good firm bids from subcontractors, and sometimes do not have sufficient time to make the necessary site inspections. A case in point is a $1,000,000 barracks project at the Engineering Depot, Granite City, Ill. Sixteen days were allowed for bidding. Two bids were received. Both were 15 percent over the Government estimate and were rejected. Thereafter, new proposals were solicited and only 12 days were allowed for contractors to prepare and submit offers. One contractor telegraphed: "Did not previously submit bid for * * * as time allowed was too short, request 30 days to submit bid. Need time to carefully consider plans and specifications and to get estimates from subcontractors and determine prices of materials. Can then arrive at realistic figures. * * *" Another contractor telegraphed: "Due to conditions concerning subcontractors will require till June 22 for our proposals barracks job. Please advise (if) acceptable." Another contractor requested 2 weeks.

Mr. DONNELLY. Do you want to comment on this, General Hardin?

General HARDIN. The only comment I have, Mr. Donnelly, is that I believe there was some discrepancy as to the reason for this contractor's telegram in which he has stated that he did not previously submit a bid, and so on. That resulted from the district engineer's rejection of the initial bids, of which, as you point out, there were only two received. But there was no record in the district engineer's office of a request for extension of time, as this telegram would imply. However, following the rejection of bids on May 26, 1951, telegraphic inquiries were sent to a number of contractors as to whether they would submit bids, and the time they would require for bidding. The answers indicated that from 2 to 30 days would be required, with several indicating that from 2 to 5 days would be sufficient. Bids were requested on June 7, and four were received. The low bid was $167,000 lower than the previous low bid, and within the 15-percent limit. The contract was then awarded on the 12th of June, 1951.

Mr. DONNELLY. General, I believe you have heretofore testified that the normal bid period—that is, the time within which potential bidders are permitted the opportunity to prepare bids—is 30 days.

General HARDIN. That is our normal time.

Mr. DONNELLY. The schedules which we have examined show that that bid period was during the 1951 construction program severely reduced in some instances to as low as 5 days, 8 days, 11 days, and so on.

General HARDIN. This is correct.

Mr. DONNELLY. In any event, the Corps of Engineers shoots for the 30-day normal period?

General HARDIN. That is our objective.

(Discussion off the record.)

Mr. RILEY. We will suspend until 10 o'clock tomorrow morning or until 10 o'clock Friday.

THURSDAY, MAY 22, 1952.

Mr. RILEY. The committee will come to order, and we will ask Mr. Donnelly to proceed with the presentation.

TULALIP ORDNANCE DEPOT AND MUKILTEO PIER, WASHINGTON

Mr. DONNELLY. Mr. Chairman, the first project that we have is one that the committee considered in the course of the Air Force hearings.

It is identified as the Tulalip Ordnance Depot and Mukilteo pier in the State of Washington. I ask that there be inserted in the record at this point the portions of the summary which are applicable to Army Ordnance.

Mr. RILEY. Without objection there will be inserted in the record such portions as you designate.

(The matter referred to is as follows:)

TULALIP ORDNANCE DEPOT AND MUKILTEO PIER, WASHINGTON

The staff discovered instances where construction work was abandoned due to a change in planning after being partially or fully completed.

The largest project visited which is in this category comprises the rehabilitation of two related ammunition handling facilities; a pier for loading seagoing vessels at Mukilteo, Wash. and an intransit storage depot for railroad cars loaded with ammunition at Tulalip, Wash., which, together, cost $1,033,000. No use has yet been made of the $816,000 intransit depot at Tulalip, and it probably never will be used as it consisted mainly of ammunition igloos and is so located geographically that, in the absence of the Mukilteo pier, it is without an outlet for overseas shipping.

On July 25, 1950, a contract was awarded for rehabilitation of the pier at Mukilteo to place it in condition so that ammunition designated for use in Korea could be loaded directly from railroad cars to seagoing vessels. This work was prosecuted on an emergency basis and completed on November 19, 1950 at a cost of $217,000. However, about a month previously (October 21, 1950), shipments from the pier were suspended, and on November 15, 1950 it was declared "excess" and custody was returned to the Air Force.

ABANDONMENT OF PROJECT AFTER COMPLETION OF REHABILITATION

Mr. DONNELLY. General Hardin, I have here some comments with respect to the Army Ordnance operation of the Tulalip Ordnance Depot. Do you want to glance over this and testify on it, or do you have some other statement? That was furnished to me by the Office of the Deputy Counselor of the Department of the Army. I assumed he would have furnished a copy to you. Would you rather that I read it for you?

General HARDIN. I do not believe it impinges on our direct responsibilities, Mr. Donnelly.

Mr. DONNELLY. No, it does not.

General HARDIN. I would be glad to read it if you would like me to, but I think it is a Department of the Army response, rather than an engineer response.

Mr. DONNELLY. Should I read it, Mr. Chairman?

Mr. RILEY. I think it ought to be in the record.

Mr. DONNELLY. I will read it quickly. This is the report of the Department of the Army with respect to the Tulalip Ordnance Depot and Mukilteo pier, Washington:

Prior to the outbreak of the Korean emergency there were no active Army ammunition outloading facilities, since the total requirements for the support at all Army occupying forces were approximately 3,000 tons per month, which could easily be met by the utilization of Navy-operated facilities at Bangor, Port Chicago, and Earle, N. J., which is just south of New York Harbor.

After the Korean emergency, the action increased in magnitude and the necessity for greater support tonnage became apparent. A team from the Office, A. C. of S., G–4, visited the Far East in late August 1950 and confirmed the fact that there was a large back-up of critical ammunition on requisition that had not been delivered to the theater. As of September 1, 1950, this back-up amounted to 854,000 measurement tons of ammunition for delivery by October 31, 1950.

Every possible site that could handle ammunition on the Gulf and west coast was placed in operation to increase out-loading capacity to meet Far East requirements. The following facilities with a potential outloading capacity of over 16,000 tons per day, of which 11,000 tons was allocated to lift Army and Air Force ammunition, were activated on the dates shown.

Then we have here a schedule of the ports and the dates upon which the first ship was loaded from each of the ports. The first date shown is for Port Chicago, Calif., which was a Naval Magazine, July 22, 1950, and the second date shown is the Mukilteo Ammunition Terminal that we are considering, 5 days later, July 27, 1950. There are then eight other ports of loading for ammunition which became operational after July 27, 1950.

It should be noted that the Mukilteo Terminal was the second facility to begin operation of those above listed, although on a limited basis. After rail storage capacity was developed in the vicinity of the pier, it enabled the loading of 50,506 long tons of ammunition in the month of September 1950, versus 14,689 long tons loaded in month of August 1950, prior to adequate rail storage. A total of 107,168 long tons were loaded by October 21, 1950, when use of the facility was terminated.

Then we get into the abandonment of the facility after they had spent the money to put it into operation.

In October 1950, it was determined that although there was still a back-up of critical ammunition on requisition, there had been sufficient delivered to meet field requirements. It was, therefore, determined to decrease the amounts being shipped and the most hazardous of the loading terminals were closed down, namely, Mukilteo, Braithwaite pier, and Parr Richmond Terminal No. 4.

If it were necessary to ship the tonnage of ammunition in the near future to the Far East that was shipped in the latter part of 1950, it would be necessary to activate the three installations mentioned in paragraph above, even though they are the most hazardous of the piers used. There would be no other way to attain the tonnage desired.

The Tulalip back-up storage area rehabilitation was authorized on July 20, 1950, because it was imperative that an area be provided which would reduce the quantity of ammunition held in the railroad holding yards, which were creating safety conditions as bad, if not worse, than those existing at Mukileto pier. Although the Tulalip area was not completed in time to be of any appreciable use before loading activities were terminated at Mukilteo, there was no way to anticipate or predict an early decline in the tonnage to be shipped, and if conditions had remained status quo this installation would have beeen a necessity.

This may be classified here, General, where you are speaking of mobilization plans, and the possible future use of this place, but it is not marked as such.

General HARDIN. No; I would not say it is necessarily classified.

Mr. DONNELLY. Suppose I read on then:

The Tulalip rehabilitation is not lost as mobilization plans call for the construction of a new ammunition pier to be served directly from this area. It has been determined by the engineer surveys on file in this office and in A. C. of S., G–4, that a pier, meeting all safety requirements can be constructed at this site for less money than at any other site on the west coast.

On the basis of a cost-comparison computation, the figures would be as follows:

(*a*) If total rehabilitation cost of Tulalip and Mukilteo are considered the cost per ton of ammunition loaded would be $9.55.

(*b*) Since the rehabilitation cost of Tulalip will be used for the new pier, just considering the cost of Mukilteo, the cost per ton of ammunition loaded would be $2.23.

(*c*) Since the greater part of the rehabilitation of Mukilteo was in rail facilities which can be salvaged to a great extent by the Air Force in their present rehabilitation, the cost in subparagraph (*b*) above would be correspondingly lowered. The estimated loss would be approximately $125,000, or a net loss of $1.19 per ton.

The over-all per-ton cost of loading ammunition at Mukileto, including rehabilitation costs, was less than the costs at any other facility in the Puget Sound area.

From this explanation I gather that there was great urgency to use that facility at the time they used it, even though the use was of very short duration?

General HARDIN. I think that is true.

Mr. RILEY. Do you have any questions, Mr. Davis?

Mr. DAVIS. No, Mr. Chairman.

WATERVLIET ARSENAL, N. Y.

Mr. DONNELLY. Now, the next one, Mr. Chairman, is a case where the Ordnance Corps started to let a contract in the amount of $2,888,000, and after the necessary planning had been done the project was abandoned with a loss to the Government of the cost of the architect fees, and the Government overhead. I ask that this be inserted in the record at this point. It relates to Watervliet Arsenal, Watervliet, N. Y.

Mr. RILEY. Without objection it may be incorporated in the record at this point.

(The matter referred to is as follows:)

WATERVLIET ARSENAL, WATERVLIET, N. Y.

On April 27, 1951, facilities for the manufacture of cannon barrels at the Watervliet Arsenal, N. Y., were authorized for the Ordnance Corps in the amount of $2,888,000. The construction services engaged a private architectural engineering firm to prepare detailed plans and specifications. Upon completion of plans and specifications on a rush basis, the work was advertised on June 7, 1951, with bids to be opened June 25, 1951.

On June 21, 1951, the Ordnance Corps advised the construction service to cancel the project. The using service had been negotiating with a manufacturer (Adirondak Foundaries) to operate the facility and when negotiatins failed to produce an agreement the using service decided not to construct the facility. The measurable loss to the Government was $40,000, the cost of the architect-engineer fees and Government overhead.

ABANDONMENT OF PROJECT AFTER COMPLETION OF PLANS

Mr. DONNELLY. General Hardin, do you care to comment on this one?

General HARDIN. Mr. Chairman, I have a comment on this incident which has been prepared by the Chief of Ordnance, if I may read it.

Mr. RILEY. Yes, sir.

General HARDIN (reading):

1. The project to put the Adirondack Foundries back into gun-forging business, is fairly well covered in the enclosed papers; however, it has not been brought out that two factors prevented the consummation of this project, namely: (*a*) The decision of Adirondack Foundries that they would prefer to devote their skill to the manufacture of cast armor for the tank program; (*b*) a study of the preliminary design of building by the architectural engineering people indicated that considerable additional expense would be necessary to incorporate elements of construction deemed necessary by the Adirondak Foundaries and the Office, Chief of Ordnance, for the economical and satisfactory production of gun forgings.

2. In view of the above, and since the proposed construction was integrated with the existing Adirondack plant, precluded operation by another contractor, it was decided to terminate the project without further expenditure of funds.

3. In essence, the decision of the Ordnance Corps and the contractor to ter-

minate the proposed action of setting up an artillery forge plant was predicated upon—

(*a*) The entire willingness of the contractor to spread thin his personnel and facilities to enter into the extremely complicated gun forging steel field.

(*b*) The coming up by design engineers of an acceptable plant and facilities lay-out which would insure that the expenditures which would have to be incurred for plant, buildings, and equipment would be in the interest of the Government.

(*c*) The continuance by the contractor in the armor casting field which itself was critical. It was a field around which the contractor, Adirondack Foundries, had capacity, know-how, and personnel.

4. These could not be met, which occasioned the termination of the project.

There are other papers on this case which have to do mainly with reference to communications which are on file, letters and directives. It is merely an index, I think, of communications bearing on the subject. I do not know that it would inform the committee of anything except a long list of directives and letters that had to do with this proposed undertaking.

Mr. RILEY. I believe the statement that you have just given us will be sufficient, General.

Mr. DONNELLY. General, these projects which we have dealing with Army Ordnance and the Chemical Corps indicate that there is a very narrow and limited field of contractors available to do their specialized type of construction and production work. Is that generally true?

General HARDIN. Yes, sir. In certain technical specialities there is a limited field. I believe it can be safely said that the manufacture of cannon tubes is a highly specialized undertaking.

Mr. DONNELLY. Is it out of the ordinary for Army Ordnance to let tentative plans with the contractor, as was the case here, and then have the contractor subsequently turn out unavailable, or undesirous of going through with it?

General HARDIN. Not to my knowledge, Mr. Donnelly. Mr. Carey might be able to elaborate on that, since he works rather closely with Ordnance.

Mr. CAREY. I did not hear all of your question, Mr. Donnelly.

Mr. DONNELLY. Would you read the question?

(The question was repeated by the reporter as above recorded.)

Mr. CAREY. I think that is a rare occasion. I think this and another one are the only projects that I know of where this situation occurred.

NISKAYUNA ORDNANCE DEPOT, N. Y.

Mr. DONNELLY. Mr. Chairman, the next Ordnance project to which I would like to invite the committee's attention resulted in a protest by the Corps of Engineers as to the contractual arrangements which had been made by Army Ordnance with respect to the amount of fee to be paid to the contractor, and I ask that this be inserted in the record at this point.

Mr. RILEY. Without objection, it may be included in the record.

(The matter referred to is as follows:)

NISKAYUNA ORDNANCE DEPOT, N. Y.

In the case of a project at Niskayuna, N. Y., comparising a new combat tank test building and other facilities, the construction work was included by the Army Ordnance Corps in a procurement contract awarded to a prime contractor (American Locomotive Co.) which then awarded a CPFF contract for the construction work to Walter Kidde Co. Supervision was not assigned to a corps

representative until several weeks after the award and start of the work. The staff found that certain data essential to proper supervision, e. g., subcontract documents, were lacking in both the district office and project records. A considerable number of purchase orders were issued after the receipt of only one bid and hence with no competition; third-party equipment rentals, which are said to total around $250,000, were reportedly about 50 percent higher than if subject to approval by the corps, and the fixed fee to the subcontractor was about $50,000 more than the corps usually allows; these overpayments apparently being due to previous commitments by the using service or its contractor. The latest cost estimate is $4,200,000, as compared with the original estimate of $2,000,000, although there was no change in scope. The principal reason given for the overrun appears to be the inaccuracy of the original estimate, although it is likely that overtime resulting from a 54-hour week continued substantially.

AMOUNT OF FEE PAID TO SUBCONTRACTOR UNDER ORDNANCE CONTRACT WITH AMERICAN LOCOMOTIVE CO.

Mr. DONNELLY. Mr. Chairman, before we give further consideration to this project, I have another document here, which is a memorandum of the district engineer of the Corps of Engineers at New York, dated February 13, 1951, that deals with the question of the amount of fee that was paid to the subcontractor, and I ask that this be inserted in the record at this point.

Mr. RILEY. All right, without objection, it will be inserted in the record at this point.

(The matter referred to is as follows:)

CORPS OF ENGINEERS, UNITED STATES ARMY,
OFFICE OF THE DISTRICT ENGINEER,
NEW YORK DISTRICT,
New York 13, N. Y., February 13, 1951.

Memorandum for: File.
Subject: Conference with Ordnance (legal) on American Locomotive contract.

1. At a conference held at this office February 9, 1951, the following were present:

Mr. Lazur, Chief, Legal Branch, Ordnance Department.
Mr. Durston, Legal Branch, Rochester Ordnance district.
Mr. Parker, New York district.
Mr. Hendl, New York district.
Mr. Hoffman, New York district.

2. Mr. Lazur stated that he was in New York in connection with the production end of contract so he thought he'd drop over and see if he could straighten out our end of it.

3. Mr. Lazur stated that he had a conference with Colonel Cron, Colonel Mielenz, Mr. Seltzer, and others of our Chief's office relative to the subject contract. He had explained that commitments had been made by Alco to Kidde and in turn by Kidde to other CPFF subcontractors which were valid and since Alco and Kidde were doing a marvelous job, he wanted the Corps of Engineers' concurrence in their actions.

4. We explained to Mr. Lazur that we had a certain schedule of fees we were authorized to use for CPFF construction work and that the fees agreed to be paid to Kidde and by Kidde to his subs were far out of line with what we could approve. It was thereupon determined that Mr. Lazur would write a memorandum to the Legal Division, Office, Chief of Engineers, advise them of fees in Kidde subcontract and the fees in the subcontracts entered into by Kidde, and request that they be approved and such approval endorsed to this office. When this is done we will be in a position to approve the documents in this office and also approve the definitive subcontract with Kidde.

FRANK T. HENDL.

Mr. DONNELLY. General Hardin, in order to orient the committee with respect to the amount of the fee involved I have two notations here. One is that the fixed fee based on the original contract in the amount of $2,000,000 was 5 percent, or $100,000. Then I have another

document here which shows that when the project was increased in scope to $4,000,000—that is, doubled in size—the feet was also doubled from $100,000 to $200,000, which would make the fee in either case 5 percent. Is that your understanding?

General HARDIN. Mr. Donnelly, according to the information available to me and from Mr. Carey's comment just now, we do not understand it that way. It would appear that the fee remained the same when the scope was increased.

Mr. CAREY. That is correct.

Mr. DONNELLY. I have here a document prepared by the office of the district engineer in New York for the use of the investigative staff, which may be in error. It sets forth here that the subcontract provided for a fee of $200,000 based on an over-all estimated project cost of $4,000,000. Is it your understanding that the fee was limited to $100,000?

Mr. CAREY. That was my understanding, that the fee was not increased, even though the scope of the work was increased to $4,000,000.

Mr. DONNELLY. Then, for the purpose of discussion here, suppose we just leave it at the original $2,000,000 contract and the $100,000 fee at the time it was negotiated. It is my understanding that that fee was in excess of the fee on a cost-plus-fixed-fee job that the Corps of Engineers would normally allow.

Mr. CAREY. That is correct.

Mr. DONNELLY. And in this case Ordnance itself negotiated the contract and the provision for the amount of the fee.

I have here a graph which you are undoubtedly familiar with, which is entitled, "Fee Curves for Cost-Plus-a-Fixed-Fee Construction Contracts." It shows the maximum Army-Navy fee on a cost-plus job, and then the normal Army-Navy fee on a cost-plus job. We look at $2,000,000, and we find the maximum fee allowed by the Army and Navy is 4 percent, which is 1 percent less than the fee allowed by Ordnance, whereas the normal amount of fee allowed on a $2,000,000 job is just a shade above 2½ percent, so that what we are talking about actually is Army Ordnance awarding a fee double the amount that the Corps of Engineers and the Army-Navy would allow.

Further summarizing the documents we have here, it is my understanding from these documents that Army Ordnance went ahead and negotiated this contract with the American Locomotive Co., which in turn negotiated with a CPFF contractor called Kidde Constructors, Inc. This was done by the commanding general of the Tank and Automotive Center at Detroit for the purpose of getting accelerated production of medium tanks which were badly needed, and after a letter contract had been awarded by the commanding general of the Tank and Automotive Center, the Corps of Engineers was drawn into it for the purpose of supervising the construction operations, and when the Corps of Engineers was drawn into the problem there were several corollary problems which were created. One of them was the amount of the fee which the Government had obligated itself to pay, 5 percent. The second was the procurement requirement normally followed by the corps of getting competitive bids on materials which are procured, and the third one, as I recall it, was the need for the district enginer of the Corps of Engineers to have basic contract documents and plans and specifications in order to intelligently discharge his functions.

Have I summarized it correctly?

General HARDIN. Yes.

Mr. DONNELLY. And, I take it, it did create a problem between the corps itself and Army Ordnance because of the earlier work that had been done by Army Ordnance in making the contract; is that right, General?

General HARDIN. Can you respond to that, Mr. Carey? I am not familiar with the details of it.

Mr. CAREY. It created a problem to straighten out the matter, which was finally done when the scope of the work increased to $4,000,000.

Mr. DONNELLY. Then it is my understanding from these documents which I have before me that Army Ordnance, faced with a protest from the Corps of Engineers, prepared a justification on a form which is entitled "Disposition form. Subject: American Locomotive Contract—Manufacture of Tanks." This document is undated, and it is addressed to the Chief of the Construction Division of the Office of the Chief of Engineers, and in this document, outlining the facts and specifically referring to the amount of the fee paid, we find here this statement:

> In the negotiation for the execution of the definitive contract, the district engineers' office had been discussing with the American Locomotive Co. and Kidde certain negotiation problems mainly in connection with the determination of fee to be paid. The Ordnance Corps, who had funded this facility expansion and originated the contract action with the American Locomotive Co., is of the view that the cooperation and good faith actions of the prime contractor should be ratified and that the arrangements made prior to the execution of the letter contract should be honored in this particular case. The same view prevails with respect to commitments made by Kidde to subcontractors under which design and construction is taking place. American Locomotive Co., who have now been asked to double their production on this particular tank, feel they should not be in a position of having to now go to Kidde Co. and its subcontractors and reverse understandings relative to fee. The New York district engineers office (Mr. Roffman and Mr. Handl, of the legal branch, and Mr. Parker, of the construction branch) state that they are in agreement with and sympathetic to the ratification action but are of the view that concurrence in the Ordnance position should be given by the Office, Chief of Engineers. This office agrees that such concurrence should be made.
>
> It would be appreciated, therefore, if the Office, Corps of Engineers, would concur in the letter and forward a copy thereof to the New York district engineers' office for their information and files on the matter. Final action then can be taken to execute the definitive instruments, both with respect to the engineer's side of the contract and the Ordnance side of the contract.

From the second document I put in the record it appeared that Mr. E. Manning Seltzer, who has been here in the hearings, and who is one of the lawyers in the Office of the Chief of Engineers, as I understand it, had a conference with respect to this matter and the net disposition of it was a letter dated February 19, 1951, in which the Office of the Chief of Engineers, by the Chief of its Legal Division, concurred in the plans of Ordnance with respect to contracting. Mr. Chairman, I offer this document for the record at this point.

Mr. RILEY. Without objection it may be included in the record.

(The matter referred to is as follows:)

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, D. C., February 19, 1951.

Subject: American Locomotive Contract—Manufacture of Tanks
To: Division engineer, North Atlantic division, Corps of Engineers, New York, N. Y.

1. Attention is invited to the enclosd disposition form, undated, from the Ordnance Corps, subject as above.
2. In line with the request of the Ordnance Corps, this office concurs in the agreement made between the Walter Kidde Co. and the American Locomotive Co. relative to fee for the facility-expansion program for the production of tanks for the Ordnance Corps.

By order of the Chief of Engineers:

L. E. MIELENZ,
Colonel, Corps of Engineers,
Chief, Legal Division.

PROCUREMENT OF ONLY ONE BID

Mr. DONNELLY. Mr. Chairman, with respect to the second part of the problem, namely, the procuring of one bid only, I have here a memorandum dealing with that subject matter, which I ask be inserted in the record at this point.

Mr. RILEY. Without objection, it may be included in the record.

(The matter referred to is as follows:)

CORPS OF ENGINEERS, UNITED STATES ARMY,
OFFICE OF THE DISTRICT ENGINEER,
NEW YORK DISTRICT,
New York, N. Y., March 16, 1951.

Memorandum for: Chief, Legal Branch.
Subject: Project at Niskayuna, N. Y.

1. In accordance with the understanding reached at the meeting by the representatives of the Rochester Ordnance Depot, American Locomotive Co. and Walter Kidde Co., to which the Army auditor (who also was present) assented, there is enclosed letter dated March 9, 1951 from the Walter Kidde Constructors to which is attached eight sheets detailing the bids used in placing the purchase orders for the American Locomotive job at Niskayuna.

2. It is noted that there are three sheets showing that three or more bids were taken orally, and two additional sheets showing where three or more formal bids were taken, but a very considerable amount of the orders—three sheets—were placed as a result of but one bid.

3. Request prompt advice as to the type of certification which should be placed upon these orders, and also whether or not any certification should be requested from the American Locomotive or Rochester Ordnance people prior to certification by this office. We have but this one copy; after receipt of your advice additional copies will be made for record.

F. J. PARKER,
Chief, CPFF (Overseas) Section.

One enclosure: Letter from Walter Kidde Contractors, dated March 9, 1951, with attachments.

Walter Kidde Constructors, Inc., should certify that the amounts for which the purchase orders and subcontracts were awarded, were the best prices obtainable, considering that such purchase orders and subcontracts were to be accomplished efficiently, effectively, and in the best interest of the Government; and that the amounts thereof are considered reasonable under the circumstances involved. American Locomotive Co. and Rochester Ordnance people should also certify along the same lines.

FAILURE OF ARMY ORDNANCE TO FURNISH DATA NECESSARY TO PROPER SUPERVISION

Mr. DONNELLY. Mr. Chairman, with respect to the third phase of the problem, that is, failure of Army Ordnance to furnish the Corps of Engineers with proper documentation in order to discharge its responsibility in supervising the contract, we have here the response of Army Ordnance, which is as follows:

With respect to the charge that essential data necessary to proper supervision, such as subcontract documents, were lacking in the district engineer's office, Ordnance is not in a position to comment in detail with regard to the adequacy of such documentation. However, the Walter Kidde Constructors, Inc., has been acting as a subcontractor for certain portions of the facilities for which Ordnance has responsibility, and it is the belief of Ordnance that Kidde has provided adequate documentation to reflect proper purchasing and supervision in accordance with sound commercial business practice.

General, may I ask you the question as to whether the contractual relationship of Army Ordnance with contractors is more flexible, or, perhaps more loose than the normal, orthodox contracting procedures followed by the Corps of Engineers?

General HARDIN. Well, Mr. Donnelly, I am aware that Ordnance, being governed more by the emergency procurement procedures, uses this means to a greater extent than the Corps of Engineers applies such principles to its construction operations.

The procurement of things in the present emergency permits rather wide latitude on procedures and we have never adopted all of those latitudes in our construction procedures. That may account for some difference in approach and the method of doing business.

Mr. DONNELLY. Well, General, in the event that this were to recur, and undoubtedly it will, would it not be better policy for Ordnance to bring the Corps of Engineers in on the ground floor so that Ordnance would have the benefit of the wisdom and counsel of the corps, which will have the ultimate responsibility of doing the work?

General HARDIN. Yes, sir; I think that is recognized by the Chief of Ordance now, and after the initiation of some of these highly urgent contracts immediately after Korea, the Chief of Engineers has told me that he had certain conversations with the Chief of Ordnance and that they had a meeting of the minds, which has resulted in the Ordnance Corps limiting their procedure in construction operations to a degree where they are no longer initiating construction activities. In the beginning it was not clearly understood apparently and until certain incidents occurred which illustrated that another agency of the Army was entering into construction work the situation was not in proper form.

Off the record.

(Discussion off the record.)

Mr. RILEY. General Hardin, were there other instances in which Ordnance contracted for construction work directly, bypassing the engineers at least during the initial stages?

General HARDIN. That is in accordance with my understanding, Mr. Chairman. It is not personal knowledge on my part, but the Chief of Engineers has discussed with me that particular incident which occurred after Korea, in one or two places in the United States, where he discussed the responsibility of construction with the Chief of Ordnance and clarified the understandings that now exist, that construction is the responsibility of the Corps of Engineers.

Mr. RILEY. These instances in which Ordnance made direct construction commitments were a departure from the usual procedure?

General HARDIN. Yes, sir.

Mr. RILEY. It is your understanding now that that matter has been clarified and the proper division of authority made?

General HARDIN. Yes, sir.

Mr. DAVIS. In this particular case at Niskayuna, the documents which we have been furnished would create the impression that you were just caught in a mess and the Corps of Engineers just put the stamp of approval on it?

General HARDEN. I think there was a further development in there, Mr. Davis, in that as the ultimate scope of the contract was arrived at, the situation was put in proper position; the contract was adjusted to provide for the full scope and the true estimated cost, but the fee was retained and kept under the engineer procedure of a proper fee for this type of an operation. In other words, the contract was adjusted to bring it into proper balance.

Mr. DAVIS. Tell me a little more about what you mean by adjusted to bring it into proper balance. What was done?

General HARDIN. I would like to read an extract from the complete memorandum which has been furnished by the Department of the Army on this matter to the committee, Mr. Davis. This document will, I understand, be printed in the record, but subparagraph 2 (e) reads as follows:

> With respect to the charge that the fixed fee allowed to Kidde was about $50,000 more than the Corps of Engineers actually allows, reference is made to the background information in paragraph 1 above dealing with the negotiations for estimated costs and fees and particularly to subparagraph (j) from which it will be apparent that if the company engineering studies had been made prior to the award of the construction contract, the cost estimated would have undoubtedly approximated $4 million, as has turned out to be the case. Based on this figure the fee usually allowed by the Corps of Engineers would in such a case have approximated the $100,000 fee which was awarded. Although it was stated in the committee notes that there was no change in scope involved in the increase from $2 million to $4,200,000 in the cost estimate, there was as a matter of fact a substantial amount of increase in the scope of the work due to the incompleteness of the original detail estimate as well as increases in the costs themselves. Some of the increases in scope were due to additional requirements over quantities originally contemplated for wash racks, spray, booths, drying ovens, cranes, grating, outside utilities, etc. It was originally contemplated that a substantial amount of overtime would be required to be utilized in the accomplishment of the project due to the critical urgency of the program, and it is not believed that overtime was a more substantial factor in the revised estimates as compared with the original estimates of cost.

That paragraph, in summary, would indicate to me that the fee was retained on the original basis but, in fact, the cost of the project was increased due to estimating the work in a proper manner after more facts were known about the undertaking. And although the fee could be assumed to be excessive on the basis of the original estimated cost which was used in the original negotiations—that is, $2 million—the fee as it ended in being was based on a $4,200,000 concept of a proper cost and is in keeping with our normal procedures.

Mr. DONNELLY. There is this further element. Originally Ordnance permitted the 5-percent fee. Then when the scope of the work did increase, as General Hardin has related, it was the Corps of Engineers who kept the fee down to that original amount, the $100,000, and in the same memorandum from which the general read it is stated:

> Based upon the increased estimate Kidde—

the increased estimate was from $2 million to $4,200,000—

Based upon the increased estimate Kidde requested an increase in the fixed fee to be paid for this construction work. However, American Locomotive and Rochester Ordnance District, in conjunction with the Corps of Engineers, was able to induce Kidde to carry on the work with no increase in the dollar value of the fee. The New York district engineer's office indicated that their rules permitted a maximum fee of 2.5 percent of the total estimated cost of construction work.

So that when you analyze the whole story, it appears that when the Corps of Engineers got into it they saw that the fee was disproportionate and they had a large part in resisting any attempt to continue that original, disproportionate fee. That is my understanding; is that correct, General?

General HARDIN. That is my understanding, too, Mr. Donnelly.

Mr. DAVIS. I was relating the impression that I got from these documents, and perhaps you can correct that impression. But in the memorandum dated February 13, 1951, a Mr. Frank T. Hendl makes the comment with respect to the fees which had previously been agreed on by Ordnance. He refers to writing to the Office of the Chief of Engineers to get approval, and he say: "When this is done, we will be in a position to approve the documents in this office and also approve the definitive subcontract with Kidde."

Six days later, on February 19, there is the memorandum that sets the pattern. The Legal Division of the Chief of Engineers seems to move right ahead, and states that in line with the request of the Ordnance Corps this office concurs in the agreement made relative to the fee for the facility extension program for the production of tanks for the Ordnance Corps.

General HARDIN. Yes, Mr. Davis. I think the proper explanation for that is, as I pointed out before, that there was nothing in fact illegal about the size of this fee, because the Procurement Act authorized a fee up to the amount of the fee that Ordnance had allowed. But, in order to depart from our practices, the district engineer did not feel free to approve it without some authority from the Chief of Engineers and before we could undertake the execution of the work or the supervision of it, he was asking, you might say, for dispensation from the Chief of Engineers to agree to that exceptional fee which had been agreed upon by Ordnance.

Mr. DAVIS. Actually, then, you would say that the office of the Chief of Engineers had no real discretion in the matter at this stage; about all that they could do was to write back and say, "It is done; go ahead;" is that not about it?

General HARDIN. It was a legal contract in the sense that it had been duly entered into with proper legal authority and, as I say, it has been the Chief of Engineers' administrative interpretation of that authority which led him to adopt curves of a lesser amount than the maximum. Whether or not the office of the Chief of Engineers had any knowledge of the lack of realism in the estimate at this time and caused them to feel that there would ultimately be an adjustment, I am not in a position to state at this time. But I think it is reasonable to say that they did have knowledge that the $2 million initial estimate was not realistic.

I can get you a little more detail on that quite readily from our records in the Legal Division upon which they must have acted at the time they wrote that memorandum. I should be glad to furnish that.

Mr. DAVIS. I doubt that that would be necessary for this purpose, in view of your statement that the contract by the Ordnance people was a binding contract. It appears to me that you were just stuck with it. I should think that the Corps of Engineers would have been in a better position if they had made that clear, that they were living with it because someone else had put it in with the authority to do it, rather than simply to have a memorandum go out that the office of the Chief concurred in the agreement that was made. That put you in the position of affirming something that I gathered you people really did not concur in, as a matter of fact.

General HARDIN. I think it is quite apparent that we were not in complete sympathy with it.

Mr. DAVIS. You were just left with the clean-up job, that is about what it amounts to. That is all, Mr. Chairman.

Mr. FURCOLO. Did you feel that the fee was exorbitant, or that it was not exorbitant?

General HARDIN. Yes, sir; it is in excess of the adopted fees which we believe are applicable to this kind of work.

Mr. FURCOLO. And with that feeling, did either the engineers or anyone from the Government talk to the one who had received the fee about it? What I am getting at is this: Very often, when you are stuck, you are stuck and there is not much that can be done about it. On the other hand, when you are talking to someone who undoubtedly is going to be looking for future work from the Government, and who has received a fee that is in excess of what it should be, an exorbitant fee, someone in authority might go to him and say, "All right, if you want to stick us now, you can, because we cannot prevent it this time, but you had better be warned that we are going to be watching out for you in the future."

General HARDIN. Yes, sir; I think that was done, as Mr. Donnelly read from this memorandum prepared by the Department, which indicated that those things were discussed.

Mr. FURCOLO. That is all.

RÉSUMÉ OF CONTRACT FOR CONSTRUCTION

Mr. DONNELLY. Mr. Chairman, may this memorandum of the Department of the Army with respect to this subject matter be inserted in the record at this point?

Mr. RILEY. Without objection, the document may be placed in the record at this point.

(The matter referred to is as follows:)

Subject: Niskayuna Ordnance Depot.

1. The construction project at the Niskayuna Ordnance Depot encompasses the construction of a final tank test building, a test track, railroad spurs, and various service facilities which are used by the American Locomotive Co. for the final modification, testing, and shipment of medium tanks under Army contract DA-30-115-ORD-22.

2. The background leading up to the initiation of this construction project is as follows:

(*a*) The American Locomotive Co. as a planned mobilization source for medium tanks was issued a letter contract to initiate production of the M47 tank on November 22, 1950. Contract was accepted by Alco on November 24, 1950. It provided for Alco to set up production facilities capable of a rate of 100 tanks per month and included necessary plant rehabilitation and rearrangement of the existing facilities and the provision of a test track.

(*b*) Pursuant to this letter order, American Locomotive contracted with the Walter Kidde Constructors, Inc., for the necessary design and engineering work necessary for the construction of the test track and the plant rehabilitation and rearrangement. At this point, the construction project, now known as the Niskayuna Ordnance Depot, with the exception of the test track, was not contemplated, as the limited capacity requested of Alco to be obtained within their existing facilities.

(*c*) During the first week of December 1950, instructions were sent out by the Chief of Ordnance to the Commanding General, Ordnance Tank-Automotive Center, to accelerate medium tank production as rapidly as possible. This was a direct result of the Chinese entry into the Korean war and the considerable loss of tank and combat vehicle equipment that occurred as well as the general critical international situation at that time. In compliance with these instructions, the Commanding General, Ordnance Tank-Automotive Center, instructed the Rochester Ordnance District to increase the scope of the work at American Locomotive to bring capacity of that company up to a production rate of 250 tanks per month. Because of the urgency of the situation and the need for speed, these instructions were verbal in the initial phase and followed later by written directives.

(*d*) As a result of these instructions it was immediately realized that it would be necessary to construct a modification and final test building at the Niskayuna test site because the existing facilities of the American Locomotive Co. were not large enough to take care of the increased capacity rate desired.

(*e*) Discussions were immediately initiated between Rochester Ordnance, Alco, and Kidde for the augmented program and a preliminary estimate of the additional facilities was developed. This estimate totaled $2 million as set forth below:

Building for modification, test, and final assembly check	$1,200,000
Railroad spurs	125,000
Test track	300,000
Fence	60,000
Service facilities	75,000
Overhead and contingencies	240,000
Total	2,000,000

(*f*) Walter Kidde Constructors, Inc., was selected by Alco to preform both the plant rehabilitation and rearrangement and the construction work connected with the Kiskayuna Ordnance Depot because this company is a well-recognized architect-engineer and construction company and had performed similar work for American Locomotive in World War II. Alco did not attempt to get competition on this work because of the urgency of the situation demanded direct negotiations with the construction contractor who was familiar with the lay-out at Alco and who was known to have the ability, organization, and know-how to complete the project in a minimum time. Rochester Ordnance District concurred in the selection of Kidde for the foregoing reasons.

(*g*) Based on the initial estimate cost of $2 million, Kidde proposed to Alcoa a fixed fee of $100,000. This was regarded as being reasonable by Alco and the Rochester Ordnance District raised no objection inasmuch as the existing regulations (Armed Services Procurement Regulation, paragraph 3–406) permitted a ceiling of 6 percent for fees on construction contract. During the first week in December 1950, the district engineer office in New York had been notified concerning the proposed acquisition of land for the test track and representatives of the real-estate division of that office visited Schenectady during the first 2 weeks of December and cooperated with respect to the taking of the necessary steps in obtaining options by American Locomotive Co. for the acquisition of such land in the town of Niskayuna.

(*h*) Pursuant to the agreements reached between Alco, Kidde, and Rochester Ordnance District, the office of Chief of Ordnance took necessary action to obtain funds for the construction work at the Niskayuna test site and forwarded a construction directive citing funds to the Corps of Engineers on December 18, 1950. This directive transferred supervision of the construction work to the Corps of Engineers and cited funds in the amount of $2 million. At that time it was realized this estimate of $2 million was not realistic and actual cost would probably be higher. However, the urgency of the project necessitated proceed-

ing on the basis of this preliminary estimate as the funds included were enough to get the work started.

(*i*) Early in February of 1951, after American Locomotive and Kidde had had time to complete designs for the actual facilities and to develop realistic estimates, the office of Chief of Engineers made a request to the office of Chief of Ordnance for an additional $2 million, bringing the total cost of the project to $4 million. The office of Chief of Ordnance took necessary action to secure these additional funds and transferred them to the Corp of Engineers in an amended construction directive dated March 6, 1951. The breakdown of this revised estimate is shown below:

Building for modification, test, and final assembly check	$1,569,000
Railroad siding	257,000
Test track	414,000
Fence	51,000
Service facilities:	
(1) Wash racks, spray booths, drying ovens, cranes, etc	267,000
(2) Grading, paving, and outside utilities	624,000
(3) Sprinkler and water storage tanks	81,000
(4) Gate houses	5,000
Subtotal	3,268,000
Contingencies	487,000
Government costs	245,000
Total	4,000,000

(*j*) Based upon the increased estimate Kidde requested an increase in the fixed fee to be paid for this construction work. However, American Locomotive and Rochester Ordnance District in conjunction with the Corps of Engineers was able to induce Kidde to carry on the work with no increase in the dollar value of the fee. The New York district engineer's office indicated that their rules permitted a maximum fee of 2½ percent of the total estimated cost of construction work. In view of this fact, Ordnance representatives felt that insofar as possible attempt should be made to hold the fixed fee at its original level regardless of increases in the scope of the work and increases in estimated cost so that the revised estimated cost and fixed fee would bear a relationship of approximately the percentage desired by the Corps of Engineers.

2. With regard to the specific issues raised by the committee, the following is submitted:

(*a*) It is true as charged that the supervision of the construction work at the Niskayuna Ordnance Depot was not assigned to the Corps of Engineers until several weeks after the award and start of the work. However, supplement No. 1 to the production contract, providing for the construction work, was executed jointly by the Corps of Engineers and the Ordnance Corps on December 23, 1950. The circumstances surrounding the delay in transferring the responsibility for this work to the district engineer's office have been set forth in paragraph 1 above. The urgency of the situation demanded prompt action and it is believed that the initiation of the project would have been delayed at least 30 to 45 days had time then been taken to acquaint the Corps of Engineers with all of the phases and details of this project in order for it to be possible for the Engineers to assume complete supervision from the outset. The normal procedure of the Corps of Engineers calls for completion of design engineering studies to detail the scope of the project before soliciting bids from construction contractors for its accomplishment. Had this been done, it is believed that the cost estimate involved would have been much more realistic and would have approximated $4,000,000 for the construction work.

(*b*) With respect to the charge that essential data necessary to proper supervision, such as subcontract documents, were lacking in the district engineer's office, Ordnance is not in a position to comment in detail with regard to the adequacy of such documentation. However, the Walter Kidde Constructors, Inc., has been acting as a subcontractor for certain portions of the facilities for which Ordnance has responsibility and it is the belief of Orduance that Kidde has provided adequate documentation to reflect proper purchasing and supervision in accordance with sound commercial business practice.

(*c*) With respect to the charge that a considerable number of purchase orders were issued by Kidde after receipt of only one bid, it is agreed that the contractor because of the urgency of the project may have failed to obtain competition in

certain instances. However, it is known that the contractor followed a general practice of obtaining formal competition on those purchases which he considered to represent a high dollar cost and where time permitted such action. The contractor in other instances considering the essentiality of time obtained oral bids from three or more competitors. It is also known that certain of his purchases were made without competition and it is believed that he handled his purchases under these three categories in accordance with good business practice. In the event that the committee has specific knowledge of any purchases which violate sound purchasing procedure, the Ordnance Corps would welcome the opportunity to investigate these specific cases and report in detail to the committee at a later date.

(*d*) As part of the basis for approval of third-party rentals under the Ordnance phase of the program, an investigation was made of third-party rentals of the Walter Kidde Co. under the Ordnance program at the American Locomotive Co. Schenectady plant. The equipment so rented was in many instances identical or similar to that rented for the construction at Niskayuna. This investigation consisted of seeking quotations from competitive suppliers in the area, seeking the advice of the General Electric Realty Corp. which engages in widespread construction activity, and references to an equipment dealers' handbook known as the Associated Equipment Dealers Guide. Practically without exception this investigation indicated that third-party rentals were obtained at rates in line with those being charged in the area. It is believed that this would prove to be similarly the case for equipment which was rented for the Niskayuna work and under the circumstances it is felt that little if any savings to the Government would have resulted had all third-party rentals for the Niskayuna project been prescreened.

(*e*) With respect to the charge that the fixed fee allowed to Kidde was about $50,000 more than the Corps of Engineers usually allows, reference is made to the background information in paragraph 1 above dealing with the negotiations for estimated costs and fees and particularly to subparagraph (*j*) from which it will be apparent that if company engineering studies had been made prior to the award of the construction contract the cost estimated would have undoubtedly approximated $4,000,000, as has turned out to be the case. Based on this figure the fee usually allowed by the Corps of Engineers would in such a case have approximated the $100,000 fee which was awarded. Although it was stated in the committee notes that there was no change in scope involved in the increase from $2,000,000 to $4,200,000 in the cost estimate, there was as a matter of fact a substantial amount of increase in the scope of the work due to the incompleteness of the original detail estimate as well as increases in the costs themselves. Some of the increases in scope were due to additional requirements over quantities originally contemplated for wash racks, spray, booths, drying ovens, cranes, grating, outside utilities, etc. It was originally contemplated that a substantial amount of overtime would be required to be utilized in the accomplishment of the project due to the critical urgency of the program, and it is not believed that overtime was a more substantial factor in the revised estimates as compared with the original estimates of cost.

Riverbank Ordnance Plant, California

Year-end obligation of funds for construction prior to preparation of plans and specifications

Mr. Donnelley. Mr. Chairman, the next project we have is another Army Ordnance project. I have a rather full report on it here that I ask be inserted in the record, dealing with the development of the Riverbank ordnance plant in California.

Mr. Riley. Without objection, it may be placed in the record at this point.

(The matter referred to is as follows:)

Riverbank Ordnance Plant, California

On June 29, 1951, the corps awarded two contracts to the Bechtel Corp. of San Francisco. This action was taken after the receipt of a construction directive

dated June 4, 1951, which included an allotment of $1,200,000 of 1951 fiscal year funds. Notice of the directive was given the district engineer of the corps by telegram dated June 1, 1951, from the office of the division engineer of the corps and reflected the following information and instructions:

"Following telephone information received from Mr. Parker, Construction Operations Division, OCE, May 31:

"OCE has request from Chief of Ordnance to rehabilitate facilities at the aluminum plant, Plancor 226–A, Riverbank, Calif. Facility is being turned over to Ordnance Department from General Service Administration, June 1 and OCE desires modification and rehabilitation to provide an installation which will be designated as Riverbank ordnance plant. The plant is joint Army and Navy facility but the Army is responsible for modification, rehabilitation, and operations. Norris Thermador Corp., of Los Angeles, will install production equipment and will be contractor-operator. OCE wants Norris Thermador Corp. to perform design and all architect-engineer services. In collaboration with Bechtel Corp., Norris Thermader Corp. has made preliminary studies of type modification and rehabilitation required. Preliminary cost estimate was $968,000. In view of urgent need immediate action to be taken by district engineer in collaboration with San Francisco Ordnance District and Norris Thermador Corp. for necessary work. It is suggested that Bechtel Corp., in view of familiarity with project, be considered construction contractor. Funds cited are $1,200,000 ORD and FAC Navy fiscal year 1951, appropriation No. 1711702.33. These are fiscal year funds and must be obligated by June 30. San Francisco Ordnance District has been advised by Office, Chief of Ordnance. OCE also advised that formal directive cannot be expected for about 1 week due to backlog in OCE. Above confirms telephone advice Lensch to Gwathmay May 31. Request narrative report procedures and schedules established to effect obligation by June 30."

The project file shows that the using services had under consideration the rehabilitation and remodeling of portions of the Riverbank plant at least as far back as February 14, 1951; however, the directive was not issued until June 4, 1951, as mentioned above. Although plans and specifications for the work had not even been started by the corps, the directive emphasized the order to obligate the funds by June 30, 1951.

Acting upon these instructions, on June 29, 1951, the corps awarded an architect-engineer contract in the amount of $99,000 to the Bechtel Corp. for design work in connection with the rehabilitation of the facilities to conform to requirements established by Norris Thermador Corp. for production equipment. Also, on the same date the corps executed a letter contract in the amount of $1,101,000 with the Bechtel Corp. obligating available funds for construction purposes.

The corps by letter dated August 6, 1951, forwarded to the San Francisco Ordnance District the preliminary drawings together with design analysis, preliminary cost estimate, and outline specifications for the work to be performed. It was requested that Ordnance review these preliminary plans and authorize the corps to proceed with plans and specifications for the rehabilitation of the plant on the basis of the revised "scope of work" as given or with such desired revisions as might be deemed advisable. It was stated that the letter contract was to be resolved into a lump-sum construction contract as soon as plans and specifications were prepared to the extent that firm construction costs could be determined.

It should be recognized that although the letter contract for construction in the amount of $1,101,000 was issued on June 29, 1951, for the purpose of obligating the funds; as of August 6, the preparation of contract plans and specifications on which the lump-sum contract was to be based had not been completed.

The scope of the work to be performed has been increased on the basis of the preliminary plans for a total estimated cost of $2,939,140.

The staff was informed that the Bechtel Corp. was designated as the construction contractor because they and Norris Thermador Co. were constructing a similar plant at Nashville, Tenn.

Irrespective of the fact that the Bechtel Corp. was so designated, the awarding of a letter contract to any company in the amount of $1,101,000 prior to the preparation of preliminary plans, specifications, and preliminary cost estimates for the work to be performed, represents undesirable contract administration. Also, as in this particular case where the contractor is designing and planning the work which he is under contract to construct, competition is completely eliminated and the Government representatives are in an unfavorable

position to negotiate the best cost to the Government of the lump-sum contract, which is to be resolved from the letter contract.

Mr. DONNELLY. Mr. Chairman, you will note from this summary of the facts that it is stated that this project was under consideration as far back as February 14, 1951. I have here a telegram of that date from the Bureau of Ordnance to the Norris Stamping & Manufacturing Co. General, I take it that this is the same company that we know as the Norris Thermador Corp.?

General HARDIN. I think it is part of the same.

Mr. DONNELLY. May I ask that this telegram be inserted in the record at this point?

Mr. RILEY. Without objection, it may be put in the record at this point.

(The matter referred to is as follows:)

LA298 SSA928
L. LLT266 XV Govt. priority PD—WUX Los Angeles, Calif., Feb. 14, 1951, 326P
Norris Stamping & Mfg. Co.,
5215 South Boyle Ave. (do not fwd.) LOSA (US).

To aid Joint Army Navy Task Group in reaching determinations relative to proposed west coast joint steel cartridge case plant it is requested that through competent construction engineers you ascertain first the approximate cost and time required to rehabilitate and remodel portions Riverbank plant for four production lines constituting complete workable plant and secondly the approximate cost and time required to construct new facilities on Government-owned land vicinity Los Angeles capable same production. Capacity of lines as follows: Two medium lines at 350 per hour. One heavy-line capacity 175 per hour. One utility line for medium or heavy at 175 per hour. Information required within 10 days.

BUREAU OF ORDNANCE SECTION MAD WASHDC 1421252.

Mr. DONNELLY. General Hardin, do you want to make any comment on this situation?

General HARDIN. I have the response from Brig. Gen. Merle H. Davis, Office, Chief of Ordnance, on this matter, which I presume will be introduced into the record. If you would like me to, I will read it in its entirety, although it might suffice to brief it for the purpose of the committee's information at this time.

Mr. DONNELLY. If it is satisfactory, Mr. Chairman, may I ask that the memorandum to which General Hardin makes reference be inserted in the record at this point and that the general be permitted to summarize it?

Mr. RILEY. The memorandum, without objection, will be placed in the record at this point and the general may summarize it, if he wishes.

(The memorandum referred to is as follows:)

OFFICE MEMORANDUM, UNITED STATES GOVERNMENT

Memorandum for record. MAY 6, 1952.

From: Chief, Ammunition Branch, Industrial Division.
Subject: The establishment, rehabilitation, and activation of the Riverbank Ordnance Plant, Riverbank, Calif.

1. During World War II, many attempts were made to produce cartridge cases for artillery ammunition from steel rather than cartridge brass, because of the increasing shortage of copper and zinc in our economy. Most of the results were disappointing. However, it was obvious at VJ-day that never again could the United States go into a major war with the successful fabrication of cartridge cases from steel unsolved. The effort to meet this situation was a completely pooled joint effort of Army and Navy Ordnance.

2. Today in all artillery calibers, we can make better cartridge cases of steel than were made formerly from brass. However, fabrication from brass was easy: Fabrication from steel requires a vast amount of specialized knowledge, extensive engineering resources on the part of the contractor and precise controls in the manufacturing process. Compared with World War II, a number of individual contractors having cartridge-case orders is relatively small, carefully selected—and "educated." Most of the private facilities are shared by Army and Navy Ordnance in the interest of flexibility of output.

3. It became obvious very early that the only way we could prepare ourselves so that steel cartridge cases would not become a limiting component in the production of ammunition, the fabricating lines must be put, so far as possible, on Government-owned real estate. The large hydraulic presses require an installation charge of nearly one-fifth the cost of the press itself. The furnaces, if moved, become a complete loss. The first important steel-cartridge-case plant was a joint Army-Navy plant defended by both services under the fiscal year 1950 budget, to be located at the Naval Ordnance Plant in Louisville. That plant is now in production on Army cases only.

4. In early February 1951, there was an intensive search on the part of both Army and Navy Ordnance for Government plants which might be converted into cartridge case plants or private real estate which might be acquired for the purpose. Part of the search was concentrated on the west coast of the United States for property for a potential plant which could be operated by Norris-Thermador, Inc., the most experienced company available in the production of steel cases. The private plant of this company in Los Angeles did not lend itself to further expansion. Plancor 226A–4 (Riverbank) was originally one of a group of aluminum reduction plants, made obsolete by new techniques in the production of aluminum. This site was under consideration as well as other sites by February 9, 1951. Norris-Thermador, at its own expense, made preliminary surveys of several of the sites under consideration. Much of the data was actually accumulated by the Bechtel Corp. which had acquired some cartridge-case-plant experience as the Navy contractor for the installation at Louisville. On March 1, 1951, a joint committee from the two Ordnance services made a favorable recommendation to their respective chiefs on Riverbank as a west-coast site for another joint steel case plant, very much larger than Louisville. And, on March 8, 1951, the Chief of Ordnance (Army) and the Chief of the Bureau of Ordnance (Navy) approved the selection.

5. Herewith is a chronology of the events which followed in the acquiring of Riverbank and start of its rehabilitation:

1951—March 23: Request to G–4 for acquisition of Plancor 226A–4 from GSA for Department of the Army.

April 3: Request submitted to OUSA with draft of letter to Munitions Board.

April 26: Tentative approval of Munitions Board given for Army acquisition. (At this time, Harvey Machine Co. of Los Angeles was attempting to get Riverbank for projects of its own, and was represented by counsel before the Munitions Board.)

April 27: Munitions Board requested transfer to Department of Army from GSA and date of turn-over was agreed upon as June 1.

May 16: Request sent to OCE to take appropriate action to rehabilitate Plancor in coordination with San Francisco Ordnance District and Norris-Thermador, Inc.

May 29: Request for rehabilitation funds made to staff for $1,000,000; this to cover Army's share for four lines and additional rehabilitation for two extra Army lines.

May 31: Office, Chief of Engineers advised $1,200,000 (Navy funds) available for rehabilitation and obligation must be made before June 30, 1951. This was also the date of agreement by GSA to a 3-year occupancy permit to the Department of the Army. (N. B. We cannot afford to return the plant to GSA—ever. It has become too vital a factor in the national security.)

6. It should be noted that before the Army obtained the Riverbank site, orders had already been placed for long lead time equipment, essentially the hydraulic presses required. Nine or more of these presses are required for each cartridge case line and presses now on order and in process of delivery cover five Army lines and two Navy. There is physical space for another cartridge case line on the site, but only with extension of one of the buildings. In order to use west coast

steel for the output of this plant, it is going to be necessary to install steel processing equipment on the Riverbank site, which will make west coast cartridge case production independent of eastern steel mills and save a high freight cost.

7. Presses, furnaces, machine tools and an increase in the equipment of two of the Army lines to augment their production capacity have resulted in an increase of approximately 20 percent over the initial total estimated cost of the completed facility. Under present conditions, this increase cost is not considered excessive.

8. It should be noted that the Corps of Engineers was placed in the position of having to obligate $1,200,000 in Navy funds between May 31, 1951, and June 30, 1951, because of expiration of the funds for obligation. Again and again, particularly under conditions of emergency, the technical services of the Army are forced to depart from what would be a normal factual procedure because the appropriate funds for the needed projects cannot be carried over for obligation. The strict limitation on appropriated funds as to expiration for obligation or for expenditure are probably an excellent safeguard in normal peacetime operations. The same limitations can be unduly hampering and restrictive at a time like the present, with fluctuating requirements for the support of Korea. This applies particularly to the expediting production funds and fiscal year 1952 procurement funds for the procurement of ammunition. Failure of the Congress to extend these funds for obligation can well result in a marked reduction in efficiency in our ammunition procurement in support of Korea.

MERLE H. DAVIS,
Brigadier General, United States Army.

General HARDIN. General Davis refers to the attempts that were made to produce cartridge cases for artillery ammunition from steel rather than brass, because of the shortage of copper and zinc in our economy.

He says that the only way they could prepare themselves to do this would be for the fabricating lines to be put, as far as possible, on Government-owned real estate; that long-lead-time hydraulic presses required advanced procurement of the equipment.

Early in 1951 there was an intensive search on the part of both Army and Navy Ordnance for Government plants which might be converted into cartridge case plants for this purpose. Part of the search was concentrated on the west coast; and one potential plant was this plant which is operated by the Norris Thermador Co. This site was under consideration as well as other sites in February 1951. Norris Thermador Co. had made preliminary surveys at its own expense of several sites under consideration. Much of the data was actually accumulated by the Bechtel Corp. which had acquired some cartridge case plant experience as a Navy contractor for the installation at Louisville. In March of 1951 a joint committee from the two ordnance services made a favorable recommendation to their respective chiefs on Riverbank as a west coast site for another joint steel case plant.

Then he develops the chronology of events which took place from March into May; of requests and letters to the Munitions Board, and tentative approval, and final approval so that on May 31 the Office of the Chief of Engineers was advised that $1,200,000 of Navy funds were available for rehabilitation and that obligation must be made before June 30, 1951. This was also the date of the agreement by the General Services Administration to a 3-year occupancy permit to the Department of the Army.

He points out that before the Army obtained the Riverbank site, orders had been placed for long-lead-time equipment, especially the hydraulic presses that were required.

He makes this observation at the end of his memorandum, after discussing the matter of procurement of machine tools, etc.

It should be noted that the Corps of Engineers was placed in the position of having to obligate $1,200,000 in Navy funds between May 31, 1951, and June 30, 1951, because of expiration of the funds for obligation. Again and again, particularly under conditions of emergency, the technical services of the Army are forced to depart from what would be a normal factual procedure because the appropriate funds for the needed projects cannot be carried over for obligation. The strict limitation on appropriated funds as to expiration for obligation or for expenditure are probably an excellent safeguard in normal peacetime operations. The same limitations can be unduly hampering and restrictive at a time like the present, with fluctuating requirements for the support of Korea. This applies particularly to the expediting production funds and fiscal year 1952 procurement funds for the procurement of ammunition. Failure of the Congress to extend these funds for obligation can well result in a marked reduction in efficiency in our ammunition procurement in support of Korea.

Mr. DAVIS. Were these fiscal-year funds that were involved here?

General HARDIN. Yes, sir; that is the part that was initially allocated, the $1,200,000 that was made available at the end of May. Whether additional funds of a nonyear character had been made available I cannot say, but I assume they were. I do not believe the $1,200,000 was sufficient. That was the initial allocation.

Mr. DAVIS. I notice that there was a preliminary cost estimate of $968,000 and by the time they got done it cost them almost $3 million; is not that right?

General HARDIN. Yes; I believe that is right.

Mr. DAVIS. That did involve some change in the scope of the work, did it not?

General HARDIN. The scope of the work was increased, according to the staff memorandum which you have before you. I will look at this explanation from Ordnance and see what was said about the scope.

There is no comment in the response of Ordnance about the change in scope, but it was habitual to initiate on the basis of some minor scope as compared to the final undertaking.

Mr. DAVIS. What would you anticipate to be the cost effect of letting the contract for the architect-engineering services and then letting the contract for the construction within a few days of that original contract, when obviously none of the architect engineering, of any importance, could have been done; and having both contracts go to the same people? That is what substantially happened here, is it not?

General HARDIN. Can you answer that, Mr. Carey?

Mr. CAREY. I think it is problematical as to just how much procedure of that kind does cost. In some cases I do not believe there would be an appreciable difference. In other cases, where the work is complicated and the scope was difficult to determine, undoubtedly it would cost additional.

General HARDIN. A fee for an architect-engineering contract is determined based upon the facility which is estimated, as best you can from some concept at the outset. But the fee is not adjustable unless the scope of the work is materially changed. That is also true with respect to a fee to a construction contractor. Even though the costs increase due to a better knowledge of the undertaking, that is the fact. That is one of the advantages of a fee undertaking, whether engineering or construction, that if there be cost increases for one reason or another, you do not change the fee. It is only when a major

difference in scope or concept enters the picture that you change the fee.

For instance, if you start out with an Ordnance project to build a facility producing so many tons of material per day, if you want to add to or change certain procedures in arriving at that production, that would have no effect on the fee. But if, on the other hand, you increase the scope of the work so as to produce twice as much material or to build another item as a part of the operation, which requires additional effort, that would be a proper reason for adjusting the fee.

So, since this was a cost-plus-fixed-fee operation, the changes in scope which are referred to here would not cause me to believe that there was any change in the fee.

Mr. DAVIS. General, from your considerable experience with the corps, do you know of any large number of cases where anything approaching this kind of a procedure took place, where you had the same people do the architectural engineering work and do the actual construction work, letting the contracts almost simultaneously?

General HARDIN. Yes, sir; I believe the tabulation which you have will show how many of those we have and you will find them in the category of AECM; that means architect-engineer management form of contract.

Now I would prefer to keep this off the record, if I may; it is in your tabulations, but I would like to say some things about projects that are classified.

Mr. DAVIS. Very well.

(Discussion off the record.)

Mr. DAVIS. Would you say, then, that this type of contract is common with respect to Ordnance construction?

General HARDIN. Yes, sir.

Mr. DAVIS. But uncommon with respect to any other type of construction?

General HARDIN. Ordnance and Chemical.

Mr. DAVIS. And Research?

General HARDIN. Yes, sir. They are the only places I know of where we have ever used them. We habitually keep our architects separate from the engineers and we have many long years of experience justifying that action.

Mr. DAVIS. I think you have demonstrated the pattern, General. I do not think it is necessary for us to go into the details any more, of that particular type.

NIAGARA FALLS CHEMICAL CORPS PLANT

INVOLVED ADMINISTRATIVE PROCEDURES AND MULTIPLE CONTRACTUAL RELATIONSHIPS WITH PRINCIPAL CONTRACTOR

Mr. DONNELLY. Mr. Chairman, it may be the pleasure of the committee to consider one of these contracts involving the Chemical Corps. In this one, we have the same firm performing three contractual functions. It acts as a CPFF subcontractor for rehabilitation. It acts as architect-engineer for engineering work required for rehabilitation and new construction. It also acts as a lump-sum subcontractor for items of work awarded without competition on proposals.

May this be inserted in the record at this point? It relates to the Niagara Falls Chemical Corps plant.

Mr. RILEY. Without objection, it may be placed in the record at this point.

(The matter referred to is as follows:)

NIAGARA FALLS CHEMICAL CORPS PLANT, NIAGARA FALLS, N. Y.

This case concerns certain rehabilitation and new construction work included in a CPFF letter order contract dated February 28, 1951, for procurement of chemical materials, which was awarded by the Chemical Corps to the Hooker Electrochemical Co., Niagara Falls, N. Y. This case is of interest because of the involved administrative procedures carried on, as well as the multiple contractual relationships assumed by the principal CPFF subcontractor, Wright and Kremers. The basic contract for this project lists the following estimated costs and fees:

	Estimated cost	Fixed fee
Inventory	$2,400	$1,000
Construction	533,000	17,589
Rehabilitation	1,173,600	28,166
End product	2,002,600	99,650

The New York district office of the corps wrote the Chief of Engineers January 22, 1951, that a conference had been held with the Chemical Corps regarding the Hooker project, that it had been agreed that the Corps of Engineers would award an architect-engineer contract, and that the district engineer would be designaetd as deputy contracting officer for construction.

On February 9, 1951, the corps negotiated a lump-sum contract for $30,000 for architect-engineer work at the Hooker project with Wright & Kremers, Inc., of Niagara Falls, N. Y. The contract included both rehabilitation work and new construction.

A CPFF subcontract was awarded Wright & Kremers by Hooker Electrochemical Co. for rehabilitation of process equipment estimated to cost $1,050,000. The fixed fee is $30,000. It is said that Wright & Kremers is the only qualified construction firm in the Niagara Falls area capable of performing such work.

Under their contract for architect-engineer work, Wright & Kremers designed a boilerhouse and warehouse in addition to other work, presumably related to the process rehabilitation. Both the boilerhouse and warehouse were approved in the New York district office.

Wright & Kremers (acting as lump-sum subcontractors) submitted proposals for construction of work which the firm designated, as follows:

No. 5329, February 27, 1951: Foundations for new warehouse	$14,170
No. 5329–D, March 16, 1951: Construction of boilerhouse	65,679
No. 5329–E, March 22, 1951: Construction of warehouse	38,372
No. 5329–V1, May 9, 1951: Rehabilitation electrical work	33,002
No. 5329–V2, May 11, 1951: Rehabilitation ventilating system	28,396

The proposals for the preceding subcontracts were approved by the New York district office on the basis of estimates prepared by Wright &. Kremers, acting in their capacity as architect-engineers. The preparation of such estimates by the architect-engineer is required under the contract for this work.

On March 23, 1951, the New York district office arranged with the Buffalo district office of the corps for inspection of the work.

This project is exceptional in that the Wright & Kremers firm performs three contractual functions: it acts as CPFF subcontractor for rehabilitation, it acts as architect-engineer for engineering work required for rehabilitation and new construction, and it also acts as a lump-sum subcontractor for items of work awarded without competition on proposals which were not carefully checked.

Mr. DONNELLY. Mr. Chairman, you will notice that one of the buildings designed by this firm and built by this firm was a boiler house. We have here a situation which might develop in these cir-

cumstances, where the building was actually overdesigned according to the committee staff engineers.

May this summary be placed in the record at this point?

Mr. RILEY. Without objection, it may be placed in the record at this point.

(The matter referred to is as follows:)

NIAGARA FALLS CHEMICAL CORPS PLANT, NIAGARA FALLS, N. Y.

An example of expensive brickwork is the boiler house at the Hooker Electrochemical Co. plant, Niagara Falls, N. Y. Plans for this structure, prepared by a private engineering firm and approved in the corps, New York office, show elaborate and costly brickwork which is out of place in any industrial plant, as well as being wasteful of time and money.

Mr. DONNELLY. General Hardin, do you have any comment to make with reference to this particular project?

General HARDIN. My only observation, Mr. Donnelly, in view of the fact that I can only comment upon the paper here since we have not investigated it in any detail, is that it is not desirable to do what apparently has been done here and I would not favor it. I think the architect-engineer should be kept separate from the building operations. I have no explanation for such an unusual situation as this.

I might clarify it for you in some fashion by inquiring from the field and add to the record, if you like.

Mr. DONNELLY. I think that would be desirable.

Mr. RILEY. I think that would be very helpful, General.

(The following statements were submitted later:)

The case history on this project is factual. However, OCE desires to submit the following remarks:

1. Rehabilitation work in connection with this plant was included in the operating contract between OCCmlO and Hooker Electro-Chemical Co., and was accomplished in two phases. The rehabilitation of process equipment, being indefinite in scope, was designed and constructed under a CPFF subcontract between Hooker and Wright-Kremers, Inc. This phase was administered under the OCCmlO. The phase which included new construction, and rehabilitation of structures and utilities, was administered by the district engineer, New York district, as deputy contracting officer. A lump-sum architect-engineer contract was negotiated with Wright-Kremers Inc., by the New York district engineer. As design of each separable feature of work was completed, i. e., foundations, superstructures, etc., proposals were obtained by the prime contractor and lump-sum subcontracts were initiated in increments to obtain expeditious completion of the entire project. Various increments of the lump-sum work was performed was negotiated with Wright-Kremers, Inc., by the New York district engineer. for these items of work were unacceptable due to the longer periods of time stipulated for completion. In some cases, contractors were not interested in submitting proposals because of the crowded working conditions and confusion that would result from the presence of other contractors already engaged on the site. In a few instances proposals were not solicited from other than the contractor engaged on a particular phase of work due to the crowded working conditions and close coordination that was required to obtain an early and expeditious completion.

2. One small portion of the work that was originally to be performed on a lump-sum basis was transferred to the CPFF subcontract. The work consisted of rehabilitation of water, steam, and air piping within the manufacturing buildings. This action was taken because clear lines of demarcation could not be made between this work and the rehabilitation of process piping.

3. In accordance with contract provisions all proposals for the lump-sum work in excess of $10,000 were approved by the deputy contracting officer prior to award by the prime contractor. Work under $10,000 could be accomplished by purchase orders issued by the prime contractor. Due to the press of other work

and the necessity to place material and equipment orders immediately, detailed reviews of all proposals and purchase orders were not made currently on the job. However, after the fact reviews by the Engineering Division of the deputy contracting officer determined that prices were reasonable. The fact that entire project was completed within the budgeted amount further evidences the quality and character of review given the various proposals.

DESIGN FOR BOILER HOUSE

OCE desires to submit the following comments on this project:

The design of this project was accomplished before the present austere standards were in effect and the directives permitted use of materials to match existing structure. All directives for similar projects now under construction provide for austere standards using concrete block curtain walls.

BENECIA ARSENAL, CALIF.

RESTRICTION OF BIDDING AND TIME FOR PREPARING BIDS

Mr. DONNELLY. Mr. Chairman, the final project in those to be presented in these hearings with respect to the Army relates to Benecia Arsenal, Benecia, Calif. May I ask that this summary be inserted in the record at this point?

Mr. RILEY. Without objection, it may be placed in the record at this point.

(The matter referred to is as follows:)

BENECIA ARSENAL, BENECIA, CALIF.

The corps awarded negotiated contracts for the construction of two large warehouses and for the conversion of existing storage buildings into shops at this installation.

The directive for this work was dated December 19, 1950. The corps advised that, due to the numerous major changes in design instructions by the Ordnance Corps of the Army, the preparation of the plans and specifications for this work was delayed. On June 7, 1951, or about 6 months after the date of the directive, the corps invited seven selected contractors to submit proposals to be opened on June 21, 1951. Three proposals were received for the warehouses and five for the conversion work. After negotiations with the firm submitting the lowest proposals, the contracts were awarded on June 30, 1951, in the amount of $5,843,253.50.

The manner in which these contracts were processed restricted competition and allowed the selected contractors insufficient time to figure their proposals. If time had not been wasted in the design stage through indecisions of the using service, firmly developed plans and specifications could not have been completed earlier and the contracts could have been awarded through regular advertisement and competitive bidding. This would have accorded other qualified and interested contractors the privilege of submitting bids.

One of the contractors submitting proposals on this work informed the staff that not only was the bidding time inadequate but that some of the plans and specifications were vague. He advised that he was still endeavoring to get interpretations from the corps by telephone on the day before the proposal opening. He stated that with more time, which would have permitted him to secure closely figured proposals from subcontractors, he probably could have cut 10 percent or more from his proposal. This contractor expressed the belief that the same situation was true of the other bidders including the low bidder.

Mr. DONNELLY. Mr. Chairman, the Department of the Army has advised us that the facts as stated here are accurate, and concludes by saying:

However, the lessons learned in solving the problems at Benicia will assist in avoiding such difficulties in future programs.

General Hardin, do you want to make any comment on this?

General HARDIN. I have no comment, Mr. Donnelly, other than what is in this Army response which I suggest be included in the record.

Mr. DONNELLY. May that be done, Mr. Chairman?

Mr. RILEY. Without objection, it may be placed in the record at this point.

(The matter referred to is as follows:)

CONSTRUCTION AT BENICIA ARSENAL

This discussion pertains to the construction of two general supply warehouses and modification of existing shop buildings at Benicia Arsenal, Calif. This work was covered by OCE Directive—Benicia Arsenal P–51–2, dated December 19, 1950.

The Corps of Engineers directive referred to above provided for two general supply warehouses, of standard design, except that "The district engineer will obtain from the commanding officer of the installation the location and amount of space to be initially dehumidified." Due to the location of the new warehouses, remote from the depot administrative and shop area, it was necessary, after the design directive was issued, to request that design include office space and an employee's cafeteria. The installation commander also recommended the inclusion of loading platforms and canopies and a heating system for the warehouse in which the office and cafeteria were proposed. Delay was necessarily incurred in the transmittal of these recommendations from the district engineer's office through channels to the Office of the Chief of Engineers to obtain necessary amendments to construction directives to provide these facilities. This project was further delayed by necessary negotiations between Ordnance and the Corps of Engineers concerning centralized procurement of dehumidifying equipment for all warehouses programed for dehumidification at ordnance installations, including those at Benicia Arsenal.

On May 25, 1951, OCE issued a directive authorizing the construction of the warehouses with modifications referred to above. On the 27th of June 1951, it was first learned by Ordnance that the standard floor loading capacity of 1,000 pounds per square foot necessitated the addition of piling which increased total cost of the project by approximately $1,000,000. In an effort to conserve construction funds, the depot commander recommended reducing floor load design below standards set by the Department of Defense. This was not approved by the Department of the Army and further adjustment of the project was necessary to conform to available funds. Upon recommendation of this office two bays (200 x 200 ft. each) were eliminated from one warehouse and a sewage disposal facility deferred for later accomplishment. Additional adjustments were subsequently required because of shortages of funds and final determinations as to scope of the project have only recently been made. These modifications were made by negotiation with the contractor.

The original Ordnance recommendations for the inclusion of office space and a cafeteria were made to the district engineer during the latter part of December 1950. Additional changes since that time have been due primarily to cost factors over which the Ordnance Corps had no control and which could not be foreseen. The special local construction factors, such as the necessity for piling and special design factors to provide an earthquake resistant structure presented funding problems which were enhanced by the rapidly expanding operational and construction programs.

It is the feeeling of the Ordnance Corps that the operational exigencies of the period in which this construction was let, plus the absence of emergency channels for on-the-spot resolution of design and construction criteria, contributed to delays which would not have occurred under normal operating circumstances. However, the lessons learned in solving the problems at Benicia will assist in avoiding such difficulties in future programs.

REQUEST FOR RECOMMENDATIONS FOR IMPROVING PRACTICES, PROCEDURES, AND OPERATIONS UNDER CRASH PROGRAM

Mr. FURCOLO. General, you have had a great deal of experience in this work. You have been through a great many of these examples

with us and I assume, as you have gone along, of necessity you must have seen places where the entire picture could have been improved greatly if new practices were put into effect or if certain changes were made.

I realize that under the crash program there were often instances where you, as well as everyone else, knew that there were wasteful practices but, as a practical matter, nothing could be done about them. Those were cases where money had to be wasted if we were to get what we needed in the shortest possible time.

On the other hand, and in spite of that, I suppose you must have some opinion as to where the situation could be improved, whether it was a crash program or not, and I was wondering if you could be helpful to the committee in this way. I wonder if you could point out—not necessarily now, but later on—if there were another crash program, just what sort of set-up you would recommend?

Also I would like to see similar recommendations from you with reference to procedures that you would recommend under normal circumstances, assuming that a crash program is out of the picture. I have reference not only to a set-up for a general pattern, but any comments that you might have, as for instance whether there is too much authority in some place and not enough authority in other places.

For example, you might be of the opinion that the man in the field should have a great deal more authority than he now has, or you might be of the opinion that he should have less.

I do not want to embarrass you in any way, but if you would care to say so, I would also like to know whether any additional authorization should be provided by law, through the Congress; or if you feel that too much discretion has been given by congressional legislation, please so state.

In other words, if you are in a position to do so, I would like you to cooperate with the committee, if it would not be of any embarrassment to yourself or to the Corps of Engineers. I think it would be very helpful to the committee if we could have your general recommendations as to what you would do to clarify the situation in the future. if it is possible to improve it.

If it meets the approval of the chairman and the committee, I might suggest that I hope we may get the same kind of recommendations from the other services and then with these recommendations from three or four of these activities, plus whatever this committee itself may decide to recommend, we may find a certain area of agreement which may help to pin-point where the real difficulties are. Personally I think it would be very helpful.

(Discussion off the record.)

Mr. RILEY. General, we are most grateful to you for the very frank conferences that we have had and the help that you have given us in these hearings. They have been most helpful to the committee and I hope will prove helpful to the engineers; and out of all the hearings and the final conclusions that are reached, I hope there will come some benefit both to the Congress and the Corps of Engineers through improved procedures and policies incident to this construction program.

Mr. FURCOLO. I want to join in those sentiments, Mr. Chairman.

General HARDIN. Thank you, Mr. Chairman. It has been most helpful to us and I do appreciate the opportunities you have given us to explain our position and actions.

I would like, if I may, to insert a statement in the record showing the magnitude of the construction contracts undertaken by the Corps of Engineers.

Mr. RILEY. That would be helpful. It will be inserted at this point.

(The statement and accompanying graph are as follows:)

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, June 11, 1952.

Hon. JOHN J. RILEY,
Chairman, Subcommittee on Military Public Works, House Appropriations Committee, House of Representatives,
Washington 25, D. C.

DEAR MR. RILEY: During the hearings conducted by your committee on the Army and Air Force construction programs, a discussion was held on May 21 in connection with the magnitude of the construction program of the Army and the Air Force. You will recall, I am sure, that I asked you to take into consideration the number of contracts and the magnitude of the operations when considering the deficiencies which had been discovered by the investigators. You then offered me the opportunity to submit data on the number of individual contracts, the range in money value of these contracts as well as the total amount in dollars, under construction as of January 1, or a later date, divided between overseas and zone of interior work.

A compilation of the information referred to above is set forth in the accompanying chart. The source of this information is a machine record tabulation from a new system of progress reporting, and is based upon the reports of May 16, 1952. While there are known to be some discrepancies in the basic data due to the newness of the report, it is believed to be well within 10 percent of error.

Your attention is invited to the columns on the right side of the chart which set forth the construction program overseas, so far as our reports are complete. Work in the European command could not be included because those reports were not available.

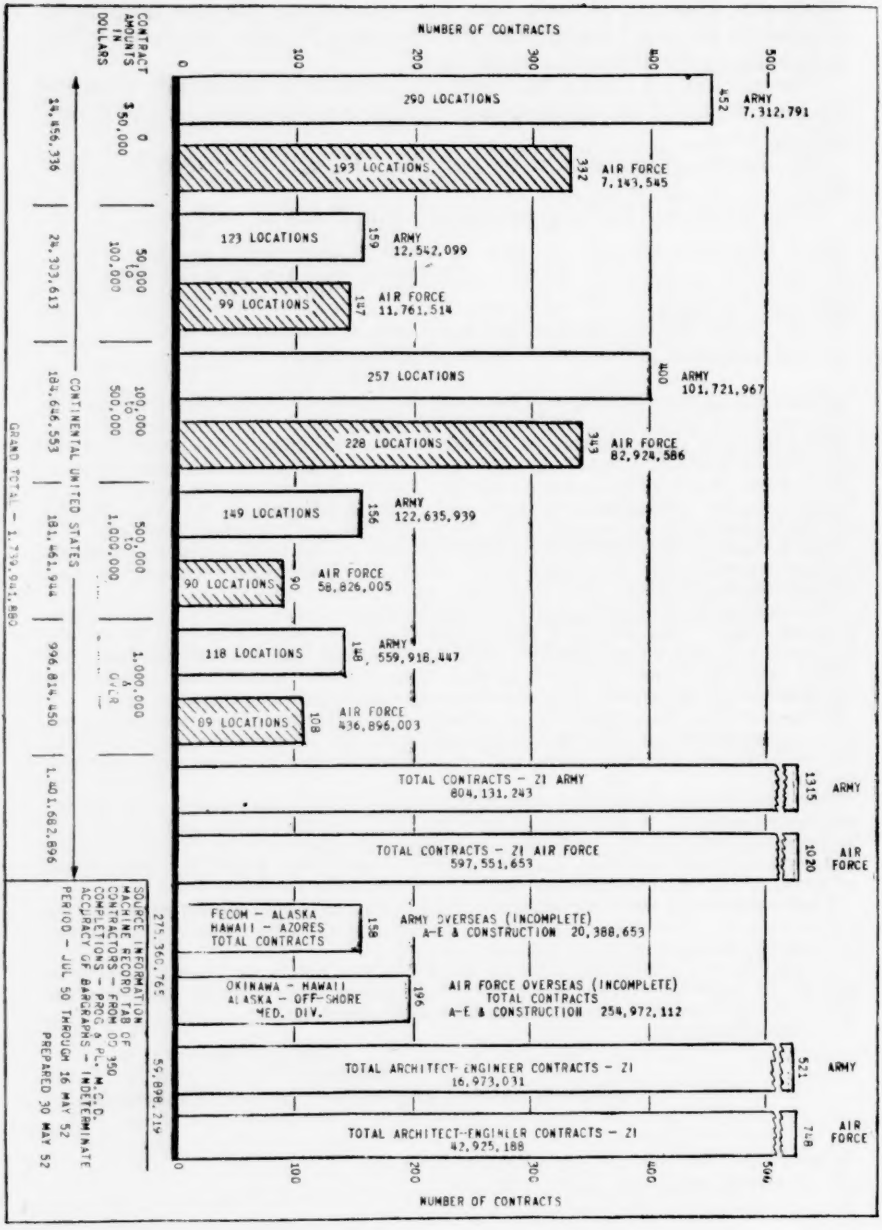
The last two columns on the right of the chart set forth the number of architect-engineer contracts in the zone of interior, both for the Army and Air Force. These contracts require a considerable amount of supervision on the part of the district and division forces, and are generally concerned with that part of the program for which construction funds have not been obligated.

I have submitted, by letter of June 4, the number of commissioned personnel on active duty in military construction, in accordance with the note you handed me concerning the contract data referred to above.

If there is any additional information which you desire or which you believe will be of value in setting forth the workload of the Corps of Engineers in military construction, I will be glad to furnish it upon request.

Sincerely yours,

JOHN R. HARDIN,
Brigadier General, U. S. A.,
Assistant Chief of Engineers for Military Construction.



Mr. RILEY. The committee will now adjourn.

APPENDIX

(The following information was referred to on p. 15:)

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, 23 May, 1952.

JOHN J. DONNELLY, JR., ESQ.,
Counsel to Subcommittee on Appropriations,
House of Representatives.

DEAR SIR: In accordance with your request, there is attached hereto a résumé of the delegations of authority to award contracts for military construction. Attached hereto, as enclosures, are copies of the various regulations and directives which are referred to in the following paragraphs.

The basic procurement authority for the Armed Services is contained in the Armed Services Procurement Act of 1947, as amended (Public Law 413, 80th Congress, and Public Law 245, 82d Congress). Prior to and immediately following the passage of Public Law 413 procurement in the Department of the Army was in accordance with Joint Procurement Regulations which implemented the requirements of the proposed Act then being considered. Thereafter, the Department of Defense published the Armed Services Procurement Regulations (referred to as ASPR) which were effective as of 19 May 1948. These regulations implemented the provisions of Public Law 413 by delegating to the Secretaries of the respective services the authorities to make findings required by the Act and delineated the powers which might be redelegated to lower echelons.

As of 1 June 1950 the ASPR required that all procurement be pursuant to advertising and on a fixed price type of contract except in the enumerated cases contained in Sec. 2 (c) (2 thru 17) of Public Law 413 which specifically authorized negotiation and established the prerequisite conditions to be met before negotiations. (See ASPR 1–301, 1–304, 1–404, 2–102 (Incl. 1).) Similarly, the Joint Procurement Regulations required advertising as a policy but implemented the authorities to negotiate by establishing the monetary authority vested in the chief of a technical service to award a negotiated contract under each category of negotiation authorized; i. e., for military construction which could be negotiated under authority of Sec. 2 (c) of Public Law 413 (see ASPR 3–218 (Incl. 1)), awards of contracts in excess of $100,000 had to have approval of the Assistant Chief of Staff, G–4. (See JPR 5–200.3, 200.4, 200.6 (Incl. 1).)

With the start of the Korean situation and the stepping up of the procurement programs, it was found that the administrative delay incident to following the then prescribed procedure to obtain authority to negotiate and award contracts for construction was causing undue delay in the Army build-up. By Proclamation 2914, dated 16 December 1950, the President declared the existence of a National Emergency which allowed the Under Secretary of the Army, on 18 December 1950, to make a Determination authorizing negotiation of any contract pursuant to Sec. 2 (c) (1) of Public Law 413. (See APP 3–201, 15 March 1951 (Incl. 2).) Under this Determination the authority to negotiate and award contracts vested in the Chiefs of the technical services was increased. The Chief of Engineers was authorized to negotiate and award construction and architect-engineer contracts without approval of higher authority when the contract did not exceed $5,000,000 or construction and $100,000 for architect-engineering work. (See Current Procurement Directive 51, dated 18 December 1950, and Joint Army and Air Force Procurement Circular No. 25, dated 15 December 1950 (Incl. 2).) In order to expedite the program, the total monetary authority was in turn delegated to the Division and District Engineers by Multiple Letter ENGAC dated 28 December 1950, Subject: "Declaration of National Emergency—Policy and Authority for Construction and Architect-Engineer Contracts," copy attached.

On 1 April 1951, the Secretary of the Army published a new set of regulations to supersede the Joint Procurement Regulations, titled "Army Procurement Procedures," and referred to as APP. This regulation incorporated the authority contained in the Current Procurement Directive 51 authorizing awards up to

96640—52—pt. 3——8

$5,000,000 in amount. (See APP 1–604.7b dated 15 March 1951 (Incl. 3).) Prior to the publication of APP a Determination and Finding, dated 15 February 1951, by the Under Secretary of the Army, and first indorsement from the Assistant Chief of Staff, G–4, dated 16 February 1951, file G4/E1 7281 (Incl. 3), the authority in the Chief of Engineers to award military construction contracts and architect-engineer contracts was increased to $15,000,000 and $500,000, respectively. In turn, the Chief of Engineers redelegated the authority to the District and Division Engineers subject to certain instructions contained in Multiple Letter dated 16 March 1951, Subject: "Declaration of National Emergency—Policy and Authority for Construction and Architect-Engineer Contracts," attached as Incl. 3. The increased authority was incorporated into APP by Changes 1 and 6, dated 15 July 1951 and 10 March 1952, respectively. (See APP 1–604.3b, 15 July 1951, and 1–604.4a, 10 March 1952 (Incl. 3).)

The above delegations enabled the Corps of Engineers to expedite the construction program materially; but due to necessary contract modifications, delays were encountered when small changes increased the contract amounts over the delegated authority which necessitated obtaining approval from the Assistant Chief of Staff, G–4. Such modifications, either in the form of Change Orders or Supplemental Agreements, were often found to be necessary due to the changing requirements of the using service. The distinction between a Change Order and a Supplemental Agreement is whether the change is within or without the scope of the basic contract; i. e., a Change Order would be issued to accomplish a change in the specifications such as a substitution of materials, whereas a Supplemental Agreement would be used to accomplish a change relative to the work under contract but not within the original scope such as constructing an additional building of the same design as the basic contract required. To meet this condition, authority has been delegated to the Chief of Engineers to approve modifications to construction contracts in $15,000,000 cumulative total increments; i. e., each accumulation of $15,000,000 in contract amount must be approved by Staff, but until a construction contract or modification thereto totals $15,000,000 authority is vested in the Chief of Engineers (see Disposition Form, dated 3 January 1952 (Incl. 4)). In turn, this authority was redelegated to District and Division Engineers by Multiple Letter dated 31 March 1952, Subject: "Declaration of National Emergency—Policy and Authority for Construction and Architect-Engineer Contracts," copy of which is attached (Incl. 4). The same authority has been delegated relative to Change Orders to architect-engineer contracts, but not to Supplemental Agreements, except that the cumulative total is set at $500,000.

It has been the endeavor of the Chief of Engineers to use the above authorities with the utmost discretion and in furtherance of this, instructions have been promulgated from this office making it the preferred policy to use advertised contracts in preference to negotiated contracts if at all possible, by the following (Incl. 5):

Individual letters to all Division Engineers, file ENGAC–301, dated 6 March 1951. Subject: Authority to award advertised contracts and modifications thereto

Multiple Letter, ENGAC 161, dated 2 April 1951. Subject: Delegation of Authority to Make Determinations and Findings in Support of Cost-Reimbursement-Type Contracts

All Division Teletype, ENGMY 2469, dated 3 May 1951

Multiple Letter, ENGAC 161, dated 12 April 1951. Subject: Declaration of National Emergency and Broadening the Industrial Base of Procurement Programs

Multiple Letter, ENGAC 161, dated 17 April 1951. Subject: Letter Order Contracts

Multiple Letter, ENGAC 161, dated 23 May 1951. Subject: Letter Contracts

Multiple Letter, ENGAC 161, dated 11 July 1951. Subject: Procedure in Negotiating Fixed Price Military Construction Contracts

Multiple Letter, ENGAC 161, dated 12 July 1951. Subject: Declaration of National Emergency—Policy and Authority for Construction and Architect-Engineer Contracts

Multiple Letter, ENGAC 161, dated 13 August 1951. Subject: Approval of of Award of Contracts of Less than $100,000.

All Division Teletype, ENGAC 1174, dated 1 October 1951.

Multiple Letter, ENGAC 161, dated 23 October 1951. Subject: Procedure in Negotiating Fixed Price Military Construction Contracts.

Multiple Letter, ENGAC 161, dated 25 October 1951. Subject: Specification Changes in Letter Contracts.

All Division Teletype, ENGAC 1347, dated 2 November 1951 (amended by All Division Teletype, ENGAC 1370, dated 6 November 1951).
Multiple Letter, ENGAC 161, dated 20 November 1951. Subject: Negotiation of Cost-Plus-A-Fixed-Fee Contracts Requiring Approval of Chief of Engineers or Higher Authority.
Multiple Letter, ENGAC 161, dated 15 January 1952. Subject: Letter Contracts for Supplemental Agreements.
Multiple Letter, ENGMM 600.1, dated 7 March 1952. Subject: Negotiation v. Advertising of Military Construction Contracts.

This policy has been brought to the attention of all contracting officers. Under date of 10 March 1952, Changes 6 of APP was issued stating that it was the policy of the Department of the Army to make all procurement by advertising except where negotiation was absolutely necessary. This policy was previously effective in the Corps of Engineers as indicated by the references above noted but has been further called to the attention of the contracting officers (see APP 2–102 (Incl. 5)). The policy relative to awards of advertised construction contracts is set forth in Orders and Regulations, paragraph 7103.08a and b, as amended by teletype dated 1 October 1951 to all Division Engineers, ENGAC 1174, listed above, and Orders and Regulations, paragraph 7103.08h, copy attached, which sets forth the conditions governing award of construction contracts. All contracts, either negotiated or advertised, require approval of the Chief of Engineers if executed on a non-standard form or with material deviations in the provisions. Orders and Regulations, paragraph 7103.10, illustrates this requirement, copy attached (Incl. 5).

Sincerely yours,

JOHN R. HARDIN,
Brigadier General, USA,
***Assistant** Chief of Engineers for Military Construction.*

Inclosures as noted.

(Enclosure 1)

ASPR 1–301 *Methods of Procurement.*—It shall be the objective of each Department to use that method of procurement which will be most advantageous to the Government—price, quality, and other factors considered. The two principal methods of procurement shall generally be effected by advertising for bids and thereafter awarding a contract to the lowest responsible bidder, all in accordance with the detailed requirements and procedures set forth in Section II. Procurement may be effected by negotiation, however, when authorized by and conducted in accordance with the detailed requirements and procedures set forth in Section III. Procurement may also be effected, as provided in Sections IV and V, by such means as (i) coordinated procurement or (ii) interdepartmental procurement.

ASPR 1–304 *Types of Contracts.*—Only the fixed-price or lump-sum type of contract shall be used for procurement by formal advertising. For procurement by negotiation, it shall be the general practice for the fixed-price type of contract to be used (with or without provision for price revision), although under such method of procurement it shall be permissible to use any other method of contracting which complies with the applicable provisions of Part 4 of Section III.

ASPR 1–404 *Special Requirements to be Met Before Entering into Negotiated Contracts.*—In addition to the requirements set forth in paragraph 1–403, no contract shall be entered into as a result of negotiation until such determinations and findings as may be required with respect to the circumstances justifying negotiation and with respect to the use of a special method of contracting have been made by the persons and in the manner prescribed in Parts 3 and 4 of Section III.

ASPR 2–102 *Use of Formal Advertising.*—In accordance with the basic policies set forth in Part 3 of Section I, procurement of supplies and services shall generally be effected by formal advertising. Bids shall be solicited from all such qualified sources of supplies or services as are deemed necessary by the Contracting Officer to assure such full and free competition as is consistent with the procurement of the required supplies or services. Current lists of bidders shall be maintained by each purchasing office.

ASPR 3–218 *Construction Work.*

3–218.1 *Authorization.*—As provided in Section 2(e) of the Act, Contracts for construction work may be negotiated without formal advertising if the following two requirements have been satisfied:

(a) the contract is for—"the erection, repair, or furnishing of any public building or public improvement * * * or the construction or repair of buildings, roads, sidewalks, sewers, mains, or similar items"; and

(b) either (i) "the contract is to be performed outside the continental United States" or (ii) "negotiation of such contract is authorized by the provisions of paragraph (1), (2), (3), (10), (11), (12), or (15) of subsection (c)" of Section 2 of the Act.

3-218.2. *Limitation.*—This authority shall be used only when the requirements set forth in the preceding paragraph 3-218.1 have been satisfied, and when all provisions of any applicable paragraph of the Act (as implemented and construed, in terms of policy, by the respective preceding paragraphs of this Part 3 of Section III relating thereto) have been complied with.

(Joint procurement regulations)

5-200 *Making and approval of awards.*

* * * * * * *

5-200.3 *Awards requiring the approval of the Secretary.*—Awards made as the result of negotiation in the following categories must be submitted for approval of the Secretary (Attn: Chief, Current Procurement Branch, SS&P Division, General Staff, U. S. Army):

(1) Personal or Professional Services authorized under APR 4-105.

(2) Experimental, Developmental, or Research work authorized under APR 4-112, which will require the expenditure of more than $25,000.

(3) Secret Articles authorized under APR 4-113.

(4) Standardization and Interchangeability authorized under APR 4-114.

(5) Supplies of a technical or specialized nature authorized under APR 4-115.

(6) Negotiation after advertising authorized under APR 4-116.

(7) Contracts in interests of National Defense authorized under APR 4-117.

(8) Contracts otherwise authorized by law under APR 4-119.

5-200.4 *Awards requiring the approval of the Chief, Current Procurement Branch.*—All awards, where the amount involved is $100,000 or more, must be submitted for approval to the Chief, Current Procurement Branch, SS&P Division, General Staff, U. S. Army:

(1) Requests for approval of awards negotiated under the authority of APR 4-103 (Public Exigency) may be submitted by telegraph or radio. In such requests the nature of the emergency must be shown in sufficient detail to explain clearly the necessity for purchasing without formal advertising, and in addition, if the purchase was made without competition, to explain why informal quotations could not have been solicited from more than one source.

(2) In addition to the information required by paragraph 5-200.6, requests for approval of awards negotiated under the authority of APR 4-111 (sole source procurement) will set forth the specific grounds upon which impracticability of competition was based. If negotiated as a result of unsatisfactory bidding, the reason therefor will refer to the serial number of the invitation for bids in response to which the unsatisfactory bids were received, in addition to a statement as to why the bidding was deemed unsatisfactory.

5-200.5 * * *

5-200.6 *Information to be furnished in requesting approval of awards.*—Requests for approval of awards referred to in paragraphs 5-200.3, 5-200.4 (2), and 5-200.5 will include the following information to the extent that the requirements are applicable to the particular procurement:

(1) Name and address of contractor.

(2) Location where contract is to be performed.

(3) Brief description of supplies and quantity to be furnished. If for services, brief description of services to be performed and of the project to which the services relate.

(4) Brief description of past performance record of the contractor.

(5) Brief description of delivery or performance schedule.

(6) Whether negotiations were conducted with more than one contractor.

(7) Type of contract to be employed. If other than a fixed price contract is to be used, a copy of the findings and determination required to be made by the Chief of the procuring service as indicated in Part 2, Section IV of these regulations will accompany this request.

(8) Reference to contract form to be used, listing and justifying any deviation or addition to the provisions of the stated form.

(9) Unit prices and total amount to be expended.

(10) Statement as to whether the price is considered reasonable. In those instances in which the negotiation involved required a cost and/or price analysis in order to ascertain reasonableness of price, such information shall be given in sufficient detail to permit proper evaluation of the price factor.

(11) Reference as to what paragraph of the APR authorizes the purchase by negotiation, and the information required for the findings of the Secretary as listed in the appropriate APR paragraph.

(12) Statement justifying the use of other than an approved specification.

(Enclosure 2)

(Army Procurement Procedure)

3–201 *National Emergency.*

3–201.2 *Application.—a.* This authority shall be used only to the extent determined by the Secretary to be necessary in the public interest during a period of national emergency declared by the President or by Congress. During periods of national emergency when such a determination has been made by the Secretary, all negotiated procurement will be accomplished under ASPR 3–201 and this paragraph and will cite as authority section 2 (c) (1) of the Armed Services Procurement Act of 1947.

b. A national emergency having been declared by the President on 16 December 1950, the Secretary has made the determination set forth below in accordance with *a* above. Accordingly, all contracts entered into by negotiation will cite as authority section 2 (c) (1) of the Armed Services Procurement Act of 1947 (P. L. 413, 80th Congress) and Presidential Proclamation 2914. During the period of the national emergency, ASPR and APP 3–202 through 3–218 will *not* be used as authority to negotiate.

DEPARTMENT OF THE ARMY

DETERMINATION AUTHORITY TO NEGOTIATE DURING PERIOD OF NATIONAL EMERGENCY

18 DEC. 1950.

1. A National Emergency having been declared by the President of the United States on 16 December 1950, I hereby determine in accordance with section 2 (c) (1) of the Armed Services Procurement Act of 1947, that it is necessary in the public interest that, to the extent provided in paragraph 2 hereof, purchases and contracts under said act be negotiated without formal advertising during the period of said National Emergency.

2. Accordingly, I hereby authorize the negotiation of purchases and contracts for supplies and services by the Department of the Army under Section 2 (c) (1) of the Armed Services Procurement Act of 1947 during the period of said National Emergency.

(Signed) ARCHIBALD S. ALEXANDER,
Under Secretary of the Army.

c. U. S. Standard Form 1036 (Statement and Certificate of Award) will *not* be used to support contracts negotiated under section 2 (c) (1) of the Armed Services Procurement Act of 1947.

DEPARTMENT OF THE ARMY,
OFFICE OF THE ASSISTANT CHIEF OF STAFF, G–4, LOGISTICS,
Washington 25, D. C., 18 December 1950.

G4/E1 66037
(CP Dir 51—FY 1951)
Subject: Declaration of National Emergency and Broadening the Industrial Base of Procurement Programs.
To: Chiefs of technical services; Commanding Generals, Continental Armies and the Military District of Washington; Commanding Generals, major oversea commands; and others, as indicated.
Distribution (a), (b), and (c).
(See Incl to CP Dir 1—FY 1950)

1. Attention is invited to the attached copy of a memorandum from the Under Secretary of the Army, same subject, dated 18 December 1950 with attached copy of Determination—Authority to Negotiate during Period of National

Emergency, dated 18 December 1950, which are published for information and guidance of all concerned.

2. All negotiated procurement initiated subsequent to receipt of this directive will be accomplished under ASPR 3–201 and JPR 4–102 and will cite as authority, Section 2 (c) (1), Armed Services Procurement Act of 1947 and Presidential Proclamation 2914. Negotiated procurement initiated prior to receipt of this directive, where such procurement has not resulted in a signed contract, may be accomplished in accordance with the appropriate paragraph of ASPR and JPR and may cite as authority, that statutory exception under which negotiations were started or may be accomplished under and may cite as authority, Section 2 (c) (1).

3. Authority is granted to deviate from the provisions of ASPR 1–301, 2–102, 3–101, and 3–203.2 to the extent such provisions are inconsistent with the policy and authority stated herein. Authority is also granted to modify statutory citations authorizing negotiation as contained in certain standard printed forms. The provisions of ASPR 3–307 and JPR 4–204 which require that a copy of Secretarial determinations with respect to negotiated contracts shall be sent to the General Accounting Office with the copy of the contract negotiated and executed thereunder, are waived for those contracts negotiated under authority of Section 2 (c) (1).

4. Subject to such instructions as may be issued by the heads of procuring activities, procurement may continue to be effected by formal advertising *only when time permits and delivery requirements are not jeopardized by such action* and only when:

a. Procuring standard commercial supplies or services; or

b. Adequate specifications or any other adequately detailed description of the required supplies or services are readily available; or

c. Procurement by formal advertising will expedite the consummation of the transaction or will obtain the required items more rapidly than by negotiation; or

d. There are no important factors to be considered in making the award, such as time of delivery, etc., other than price and it is anticipated that the supplies or services can be purchased more economically by formal advertising; or

e. The list of suppliers to be solicited is extensive, full competition is desired and purchase by formal advertising will be accomplished more efficiently and expeditiously than by negotiation; or

f. In such additional instances as are deemed to be necessary and as prescribed by the head of a procuring activity.

5. All other provisions of ASPR, JPR, and other Department of the Army directives, not inconsistent with the policy and authority set forth herein will remain in full force and effect. In this respect the requirements of JPR 5–200.3 (1) in connection with the approval of personal or professional service contracts and JPR 5–200.3 (5) in connection with the approval of awards for research and development contracts (see JAAF Proc Cir 25, 15 Dec 1950), remain in effect notwithstanding the fact that the contracts involved are negotiated under Section 2 (c) (1) rather than Sections 2 (c),(4), (5), or (11).

6. Copies of implementing instructions issued hereunder will be forwarded in triplicate to the Assistant Chief of Staff, G–4 (Attn.: Chief, Current Procurement Branch).

FOR THE ASSISTANT CHIEF OF STAFF, G–4:

P. M. Seleen,
P. M. SELEEN,
Colonel, GSC,
Chief, Current Procurement Branch.

1 Incl. Memo fr USA, 18 Dec 50, w/1 Incl.
DISTRIBUTION OF PREVIOUS CP DIRECTIVES:
CP Dir 49—(a), (b), and (c).
CP Dir 50—(a) and (b).

DEPARTMENT OF THE ARMY,
OFFICE OF THE UNDER SECRETARY,
Washington, D. C., Dec. 18, 1950.

Memorandum for: Assistant Chief of Staff, G–4.
Subject: Declaration of National Emergency and Broadening the Industrial Base of Procurement Programs.

Attention is invited to the attached determination authorizing procurement by negotiation during the present period of National Emergency proclaimed by the President of the United States. In connection with procurement undertaken hereafter during such National Emergency, the following policies shall be followed, in accordance with the direction of the Secretary of Defense.

1. Whenever procurement is made by negotiation and when consistent with the accomplishment of procurement objectives, quotations or proposals shall be solicited from such qualified sources as are deemed necessary to insure effective competition in order that the procurement be made to the best advantage of the Government, price and other factors considered.

2. Subject to such instructions as may be issued by the heads of procuring activities, formal advertising will continue to be used in appropriate cases. However, advertising will not be used when such use will adversely affect the acceleration of procurement or the broadening of the industrial base. Such instructions should of course be consistent, so as to prevent divergent practices by different procuring activities in similar cases.

3. It is essential, in complying with this memorandum, that contracts be spread across Industry as widely as possible in order to broaden the industrial base of our procurement program.

4. All procuring activities and agencies should pay particular attention to:

a. The greatest possible integration of current procurement contracts with the industrial mobilization program and the accepted schedules of production.

b. The equitable distribution of procurement contracts among the maximum number of competent suppliers. The concentration of contracts with a few leader suppliers is to be avoided unless the necessity therefor is clear.

c. The utilization of existing open industrial capacity to the maximum. Expansion of facilities should not be authorized when open capacity can be found. Whenever time permits, and in order to broaden the mobilization base, additional contractors should be utilized in lieu of multi-shift or overtime operation.

d. The fullest possible use of small business concerns.

e. The utilization in negotiation of competition and multiple awards, whenever possible.

f. The aggressive encouragement or requirement of subcontracting by prime contractors.

g. The provision of maximum incentive to the producer for the reduction of his costs.

h. The placement of contracts with a view to economies in the use of transportation facilities.

i. The availability of manpower in distressed employment areas or in areas of manpower shortages.

j. The reservation of special skills and abilities for the more difficult production tasks.

5. To the extent necessary, procurement procedures and practices should be modified to conform to the foregoing and prior directives of this office inconsistent herewith are hereby modified. Particular attention should be paid to the caliber of personnel engaged in the negotiation of contracts.

(Signed) ARCHIBALD S. ALEXANDER,
Under Secretary of the Army.

1 Incl. Determination.

DEPARTMENT OF THE ARMY

DETERMINATION AUTHORITY TO NEGOTIATE DURING PERIOD OF NATIONAL EMERGENCY

18 DEC. 1950.

1. A National Emergency having been declared by the President of the United States on 16 December 1950, I hereby determine in accordance with section 2 (c) (1) of the Armed Services Procurement Act of 1947, that it is necessary in the public interest that, to the extent provided in paragraph 2 hereof, purchases and contracts under said act be negotiated without formal advertising during the period of said National Emergency.

2. Accordingly, I hereby authorize the negotiation of purchases and contracts for supplies and services by the Department of the Army under Section 2 (c) (1) of the Armed Services Procurement Act of 1947 during the period of said National Emergency.

(Signed) ARCHIBALD S. ALEXANDER.
Under Secretary of the Army.

Proc Cir 25

JOINT ARMY AND AIR FORCE PROCUREMENT CIRCULAR No. 25

DEPARTMENTS OF THE ARMY AND THE AIR FORCE
WASHINGTON 25, D. C., *15 December 1950*

Effective until 15 June 1952 unless sooner rescinded or superseded

	Section
JOINT PROCUREMENT REGULATIONS—Pars. 4–103.2; 4–105.4; 4–106.1; 4–111.1; 4–201; 4–301; 5–200.3; 5–200.4; 5–200.5; and 5–202.2 amended (*Army only*)	I
RESCISSION—Sec. I, DA Proc. Cir. 11, 1947; par. 13, sec. V, JAAF Proc. Cir. 4, 1948; and par. 1, sec. I, JAAF Proc. Cir. 17, 1950	II

I. JOINT PROCUREMENT REGULATIONS.—Paragraphs 4–103.2, 4–105.4, 4–106.1, 4–111.1, 4–201, 4–301, 5–200.3, 5–200.4, 5–200.5, and 5–202.2, Joint Procurement Regulations, are amended as indicated below, *applicable only within the Army Establishment:*

1. Paragraph 4–103.2, pertaining to negotiation of contracts under section 2 (c) (2) (Public Exigency), Armed Services Procurement Act of 1947, is rescinded and the following substituted therefor:

4–103.2 Application.

(1) Section 2 (c) (2) of the Armed Services Procurement Act of 1947 may be used as authority for negotiating a contract if the compelling and urgent need for the supplies or services to be purchased is within the limitations of ASPR 3–202 and this paragraph. In using this authority, contracting officers will assure themselves that the need for negotiating is sufficiently compelling and of unusual urgency, and that the emergency situation requires an immediate purchase for which delivery cannot be effected within the time required by means of formal advertising.

(2) When negotiating under this authority informal competition to the maximum extent practicable within the time allowed will be obtained.

(3) A procurement of material to effect necessary and emergency repairs to a broken water main would be appropriate under ASPR 3–202, provided that the emergency conditions require immediate replacement of defective materials. This authority could also properly be cited for the emergency procurement of packing material required to effect an emergency air or rail shipment. Also if a procurement is appropriate and proper and is considered an emergency procurement of a high priority nature and which could not otherwise be procured by formal advertising within the time required for delivery, the circumstances involved in the particular procurement, such as for supplies urgently needed to lend military support in connection with a national or international situation or to meet immediate emergency needs of an Army expansion program, may be used to add support to the justification required to be made by the contracting officer. The facts bearing on the emergency situation, however, must clearly be shown in the justification in sufficient detail to explain clearly the necessity for purchasing without

formal advertising. The contracting officer's justification must be supported by the existence of specific emergency circumstances which in themselves relate to the particular purchase being effected.

(4) A short delivery or performance requirement in itself is not a sole justification for the use of section 2 (c) (2) of the Armed Services Procurement Act of 1947. The reasons for effecting delivery or performance by a certain date must be of such a nature that they will fully support the contracting officer's action in the event he finds it necessary to use this authority. When delivery requirements are of the utmost importance, officials supervising the issuance of procurement directives to contracting officers will be responsible for clearly indicating in the directives the exigent importance for having the supplies delivered by certain dates, including pertinent data as to the reasons therefor. In this connection, contracting officers should not be expected or required to negotiate contracts under this authority unless facts sufficient to support their actions can be presented to them in writing by responsible persons in positions of higher authority.

(5) Section 2 (c) (2), Armed Services Procurement Act of 1947, and ASPR 3–202 will not be used as authority to negotiate when the procurement is such that it can be properly negotiated under the provisions of ASPR 3–203, 3–205, 3–211, 3–213, 3–214, or 3–216.

2. 4–105.4 is rescinded and the following substituted therefor:

4–105.4 Services authorized.—Section 2 (c) (4) of the Armed Services Procurement Act of 1947 shall be used as authority to negotiate personal or professional service contracts only when all of the conditions set forth in ASPR 3–204.2 have been satisfied. Architect-Engineer contracts which wholly or partially involve the procurement of personal services will be entered into under the authority of Section 15 of the Act approved 2 August 1946 (PL 600, 79th Cong.). All such contracts will be submitted for approval in accordance with paragraph 4–105.5 below.

3. Paragraph 4–106.1, pertaining to the negotiation of contracts under section 2 (c) (5) (Services of Educational Institutions), Armed Services Procurement Act of 1947, is rescinded and the following substituted therefor:

4–106.1 Authorization.—Contracts negotiated under section 2 (c) (5) of the Armed Services Procurement Act of 1947 (ASPR 3–205, Services of Educational Institutions) will be supported by a Determination and Findings signed by the Under Secretary of the Army when the amount exceeds $25,000 (including supplemental agreements or other modifications of contracts which increase the original contract price to a total amount in excess of $25,000) and is for other than tuition contracts for military students.

4. Paragraph 4–111.1, pertaining to the negotiation of contracts under section 2 (c) (10) (Competition Impracticable), Armed Services Procurement Act of 1947, is rescinded and the following substituted therefor:

4–111.1 Authorization.—Negotiation is authorized if it is impracticable to secure competition in accordance with ASPR 3–210, except that contracts negotiated under this authority will be supported by a Determination and Findings signed by the Under Secretary of the Army when for studies or surveys covering Industrial Mobilization Planning Phase I Studies.

5. Paragraph 4–201 is amended by adding new subparagraphs (8) and (9) as follows:

(8) The determination required by paragraph 4–106 with respect to any contract negotiated under section 2 (c) (5) of the Armed Services Procurement Act of 1947 when the amount exceeds $25,000 and is for other than tuition contracts for military students.

(9) The determination required by paragrabh 4–111 with respect to any contract negotiated under section 2 (c) (10) of the Armed Services Procurement Act of 1947 when for studies or surveys covering Industrial Mobilization Phase I Studies.

6. Paragraph 4–301 is rescinded and the following substituted therefor:

4–301 Basic policy.—In addition to the basic policies set forth in Part 4, Section III, ASPR, the following policies are applicable to negotiated procurement:

(1) Price redetermination clauses (as listed in 4–302 and following) should be used in all instances when one or more of the following are applicable:

(*a*) There is no effective competition;

(*b*) There are no data to indicate reasonableness of price;

(*c*) There is no independent Government estimate to indicate reasonableness of price;

(*d*) The estimate of the low offerer, or the only offerer, exceeds by 5 percent or $5,000, whichever is lesser, the amount of the independent Government estimate;

(*e*) It is necessary or desirable to eliminate charges for contingencies from the contract amount;

(*f*) It is necessary or desirable to incorporate incentives to increase production efficiency and to reduce costs; or

(*g*) Other circumstances require protection of the interests of the Government by use of price redetermination clauses.

(2) In accordance with the above, the following forms of price redetermination clauses may be used:

(*a*) Form III in any negotiated contract up to amounts not in excess of $100,000.

(*b*) Form II–B in any negotiated contract where the delivery schedule calls for deliveries over a prolonged period, regardless of contract amount.

(*c*) Form IV in any negotiated contract, regardless of contract amount.

(3) Upward revision to be allowed in Forms II–B and IV, price redetermination clauses, will be limited to 10 percent in all possible cases and in any event limited to 25 percent. Only the standard price redetermination clauses, without deviation except as authorized herein, will be used under this excepted authority. In view of the protection afforded to the contractor by the use of a price redetermination clause in reduction of the risks to him, careful consideration will be given in determining the rate of profit to be allowed, with due weight being given to the percentage of the contract consisting of subcontracting, standard commercial items ("off-the-shelf" items), and purchased parts. It will not be assumed that a contractor who agrees to inclusion of a Form III, price redetermination clause in a proposed contract is assuming appreciable risk, unless it can be determined that the price offered by him does not include contingency provisions. Form IV, price redetermination clause, will be used in lieu of the Form II–B clause in production contracts in all instances, regardless of the contract amount, when the delivery schedule is so short as to preclude completion of price redetermination well in advance of completion of the contract or deliveries thereunder.

(4) Letter orders, or any other type of preliminary contract will not be used without the prior approval of the Assistant Chief of Staff, G–4, United States Army, *except* that chiefs and acting chiefs of technical services are authorized to issue letter orders contemplating definitive contracts in amounts not to exceed $5,000,000 (see (*a*) and (*b*) below). This authority may be redelegated by chiefs of technical services to the extent deemed necessary to personally selected members of their organizations. Such selected members are not authorized to redelegate this authority. Letter orders shall be superseded as soon as possible by a final definitive contract. Letter orders which have not been superseded by a final definitive contract within 120 days from the issue date of such letter order will be reported to the Assistant Chief of staff, G–4, United States Army (ATT'N: Chief, Current Procurement Branch) with full justification as to the circumstances precluding the execution of a formal definitive contract within such time.

(*a*) Subject to the foregoing approval requirements, letter orders may be used only when—

1. It is essential to give to the contractor a binding commitment in order to permit him to commence work immediately; or

2. The nature of the work involved prevents the preparation of definitive requirements or specifications, thereby making it impossible to negotiate a final contract at that time.

(*b*) The above authority to chiefs of technical services to issue letter orders is contingent upon compliance with the conditions set forth below:

1. That the definitive contracts will contain all standard required clauses, in addition to such standard optional clauses necessary to fully protect the interest of the Government, and that this provision shall be made a condition of each letter order;

2. That no letter order will be issued under the authority contained in this paragraph in an amount in excess of 50 percent of the total estimated contract amount;

3. That all fixed-price contracts, when there is no information upon which to base reasonableness of price, will contain applicable standard price redetermination clause with upward limitation thereunder held to a minimum, but in no event to exceed 25 percent, and that this provision shall be made a condition of each applicable letter order;

4. That the fixed-fee in all cost-plus-fixed-fee contracts will not exceed 7 percent of cost, exclusive of fixed-fee, and that this provision shall be made a condition of each applicable letter order; and

5. That the profit or fixed-fee to be paid shall be consistent with the protection afforded to the contractor in the minimizing or removal of risk to him, with due consideration given to the following elements of cost: (i) material, (ii) subcontracting, (iii) purchased parts, and (iv) "off-the-shelf" items.

7. Paragraphs 5–200.3, 5–200.4, 5–200.5, and 5–202.2 are rescinded and the following paragraph substituted therefor:

5–200.3 Required approvals of contracts or awards of contracts.

(1) *Personal or professional services.*—Contracts (including supplemental agreements, change orders, and any other type of modification) for personal or professional services negotiated under section 2 (c) (4), Armed Services Procurement Act of 11947, and ASPR 3–204 (see paragraph 4–105.5) will be submitted for approval by the Secretary regardless of amount. Requests for approval will be addressed to the Chief, Current Procurement Branch, Assistant Chief of Staff, G–4, United States Army.

(2) *Leases of Government property.*—Leases of Government property regardless of amount, except as heretofore or hereafter may be delegated by the Secretary, will be submitted for approval by the Secretary. Requests, for approval will be addressed to the Chief, Current Procurement Branch, Assistant Chief of Staff, G–4, United States Army.

(3) *Construction and rehabilitation of installations*

(*a*) *Chief, Current Procurement Branch.*—Award of negotiated contracts entered into by the continental armies or the Military District of Washington for the construction and rehabilitation of installations for use in connection with the program to expand the United States Armed Forces will be submitted to the Chief, Current Procurement Branch, Assistant Chief of Staff, G–4, United States Army, for approval when the amount involved exceeds $1,000,000. Approval of award requirements for contracts entered into under the jurisdiction of the Chief of Engineers are set forth in subparagraph (6) below.

(*b*) *Continental Army commanders.*—Awards of negotiated contracts entered into by the continental armies or the Military District of Washington for construction and rehabilitation of installations for use in connection with the program for expansion of the United States Armed Forces will be approved personally by continental Army commanders or their deputies, or the Commanding General of the Military District of Washington or his Deputy when the amount involved exceeds $250,000 but does not exceed $1,000,000.

(*c*) *Subordinate commanders and chiefs of field procuring offices.*—Awards of negotiated contracts entered into by the continental armies or the Military District of Washington for construction and rehabilitation of installations for use in connection with the program for expansion of the United States Armed Forces may be approved personally by subordinate commanders or their deputies, provided that such subordinate commanders or their deputies have been granted such authority personally by the respective Army commander or the Commanding General of the Military District of Washington, when the amount involved exceeds $100,000 but does not exceed $250,000. Continental Army commanders and the Commanding General of the Military District of Washington may also personally select alternates for the subordinate commanders or chiefs of field procuring offices to exercise this authority personally.

(4) *Architect-Engineer contracts.*—Awards of Architect-Engineer contracts under which the Government is to acquire a finished design job or engineering report, including all required drawings, plans and specifications, and under

which there is little, if any, direct Government supervision of the contractor, and the fee is based upon the results to be accomplished, will be submitted to the Chief, Current Procurement Branch, Assistant Chief of Staff, G–4, United States Army, for approval when the amount involved exceeds $100,000. If personal services are involved, the approval requirement in subparagraph (1) above is applicable; also, see paragraph 4–105.4.

(5) *Research and development contracts.*

(*a*) *Chief, Current Procurement Branch.*—Awards of negotiated contracts for research and development (ASPR 3–205 or 3–211) will be submitted to the Chief, Current Procurement Branch, Assistant Chief of Staff, G–4, United States Army, for approval when the amount involved exceeds $100,000.

(*b*) *Chiefs of technical services.*—Awards of negotiated research and development contracts will be approved personally by chiefs of technical services or their deputies when the amount involved exceeds $25,000 but does not exceed $100,000.

(*c*) *Chiefs of Field Procuring offices.*—Awards of negotiated research and development contracts when the amount involved does not exceed $25,000 may be approved personally by the chief or acting chief of the appropriate field procuring office, provided that such chief or acting chief has been granted such authority by his chief of technical service personally. Chiefs of technical services may also select personally alternates for the chiefs of field procuring offices to exercise this authority personally.

(6) *Negotiated contracts in general.*—Award approvals required for all negotiated contracts for supplies, services or construction, not included in subparagraphs (1) through (5) above are as indicated below.

(*a*) *Chief, Current Procurement Branch.*—Awards of negotiated contracts not included in subparagraphs (1) through (5) above will be submitted to the Chief, Current Procurement Branch, Assistant Chief of Staff, G–4, United States Army, for approval when (i) the amount exceeds $5,000,000 and the contract is being entered into by a contracting officer under the jurisdiction of a *technical service or* (ii) the amount exceeds $100,000 and the contract is being entered into by a contracting officer *not* under the jurisdiction of a technical service.

(*b*) *Chiefs of technical services.*—Chiefs and acting chiefs of technical services are authorized to approve awards of negotiated contracts not included in subparagraphs (1) through (5) above in amounts not in excess of $5,000,000. This authority may be redelegated by chiefs of technical services to the extent deemed necessary to personally selected members of their organizations. Such selected members are not authorized to redelegate this authority.

5–200.4 Contract review.—At least one competent person, whether or not presently assigned to such office, will be assigned to the duty of reviewing in an advisory capacity all contracts prior to contract approval by the subordinate commanders or chiefs of field offices. In those instances wherein this is impracticable this provision may be waived upon determination made to that effect by the Army commander, Commanding General, Military District of Washington or the Chief of a technical service, as appropriate.

5–200.5 Exigency and competition impracticable.—Requests requiring approval of higher authority of contracts or awards of contracts negotiated under the authority of ASPR 3–202 and paragraph 4–103 (Public Exigency) may be submitted by telegraph or radio. In such requests the nature of the emergency must be shown in sufficient detail to explain clearly the necessity for purchasing without formal advertising. In addition to the information required by paragraph 5–200.6, requests for approval of contracts or awards of contracts negotiated under the authority of ASPR 3–210 and paragraph 4–111 will set forth the specific grounds upon which impracticability of competition was based.

5–202.2 Approval of supplemental agreements and change orders.—Any supplemental agreement, change order, or any other type of modification of a contract, which has the effect of increasing the original contract price so that the total amount exceeds the monetary limitation beyond which the head of the procuring activity is not authorized to approve negotiation or award of a contract, will be submitted to the Assistant Chief of Staff, G–4, United States Army (Attention: Chief, Current Procurement Branch) for approval and be accompanied with an appropriate Determination and Findings for authority to negotiate, if signature by the Under Secretary of the Army is required.

II. RESCISSIONS.—Section I, DA Procurement Circular 11, 1947; paragraph 13, section V, JAAF Procurement Circular 4, 1948; and section I, JAAF Procurement Circular 17, 1950.

[AG 400.13 (15 Dec 50)]

BY ORDER OF THE SECRETARIES OF THE ARMY AND THE AIR FORCE:

OFFICIAL:
EDWARD F. WITSELL
Major General, USA
The Adjutant General

J. LAWTON COLLINS
Chief of Staff, United States Army

OFFICIAL:
K. E. THIEBAUD
Colonel, USAF
Acting Air Adjutant General

HOYT S. VANDENBERG
Chief of Staff, United States Air Force

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., 28 December 1950.

ENGAC

Subject: Declaration of National Emergency—Policy and Authority for Construction and Architect-Engineer Contracts.

To: Division Engineers
District Engineers
Assistant Chief of Engineers for Military Construction

1. Attention is directed to the following references:

a. Memorandum from the Under Secretary of the Army to the Assistant Chief of Staff, G–4, 18 December 1950, subject as above, together with inclosure thereto entitled "Department of the Army Determination—Authority to Negotiate during Period of National Emergency," 18 December 1950, and signed by the Under Secretary of the Army, copies of which are inclosed.

b. Current Procurement Directive 51–FY 1951, issued by the Assistant Chief of Staff, G–4, 18 December 1950, copy inclosed.

c. JAAF Procurement Circular No. 25, 15 December 1950.

2. Attention is also directed to paragraph 4 of CP Directive 51 [reference 1*b* above] relative to procurement by advertising. The standards prescribed therein are further implemented as follows:

a. Construction contracts

(1) When plans and specifications are complete enough to permit lump-sum bidding, you shall decide whether to negotiate or advertise, on the basis of the time element involved.

(2) Where the work can be defined by partial plans and specifications which are not sufficiently complete to permit formal advertising, negotiated lump sum or unit price contracts will be used, if practicable, in lieu of cost-plus-a-fixed-fee contracts.

(3) When the completion date is such that you must start planning and building at the same time, cost-plus-a-fixed-fee contracts will be used.

(4) When the project is located off shore in areas where construction experience is lacking or otherwise of such a nature that makes it impracticable to estimate costs, the cost-plus-a-fixed-fee type of contract will be used.

(5) Any contract to be negotiated on a fixed price basis should generally be accomplished by soliciting proposals from such qualified contractors as may be deemed necessary to insure effective competition, consistent with meeting the required completion date.

(6) When a contract is let by negotiation, letter orders should be issued in the first instance, when they will serve to expedite the completion of the work.

(7) All types of contracts must contain adequate requirements for maintaining sufficient plant, personnel, extra shifts and overtime to insure completion within the specified time limits.

b. Architect-Engineer Contracts.

(1) Architect-engineer contracts, in all cases, will be negotiated.

(2) Principles determining the type of contract to be used are fully covered in paragraph 4106.15, Orders and Regulations.

c. A determination and finding justifying the use of a cost-plus-a-fixed-fee contract must be made in each instance by the Chief of Engineers.

3. The following principles govern the selection of construction contractors, and architect-engineers, when the element of competition is lacking:

(a) The contractors must be fully capable of accomplishing the required design or construction work.

(b) The contractor should be located in the general geographical area in which the work is to be performed. The guiding principle to be followed in determining the size of the geographical area is to make it large enough to provide a reasonable choice of contractors capable of handling the project. Unusually large or complicated projects thus generally will require consideration of firms within a large geographical area.

(c) Avoid overloading any one firm.

(d) You may select construction and architect-engineer contractors for contracts within the limitations of your delegated approval authority without further reference to this office. If the award of the proposed contract is not within your approval authority, recommendations as to the contractor to be used will be submitted to this office as now prescribed.

4. Attention is directed to paragraph 7 of JAAF Procurement Circular No. 25 relating to approval of contracts or awards of contracts. Within the prescribed limitations of delegated authority, Title II work, i. e., the supervision of construction, may be included in architect-engineer contracts, without further reference to the Chief of Engineers.

5. Subject to the aforementioned limitations and those set forth in paragraph 7, Section I of JAAF Procurement Circular No. 25, I hereby redelegate to the above addressees without power of further delegation the authority to approve awards of all negotiated contracts for construction in an amount not to exceed $5,000,000, and all architect-engineer contracts in an amount not to exceed $100,000.

6. Subject to the limitation stated in paragraph 6, Section I of JAAF Procurement Circular No. 25, relative to the use of Letter Orders, I hereby redelegate to the above addressees without power of further delegation the authority to issue letter orders in amounts not to exceed $5,000,000 and not in excess of 50 percent of the total estimated contract amount.

7. The requirement in paragraph 6 of JAAF Procurement Circular No. 25 that a 7% fixed fee limitation for all cost-plus-a-fixed-fee contracts should be made a condition of each applicable letter order will be changed by agreement with the Assistant Chief of Staff, G–4. That provision will be revised and the requirement for its inclusion in letter orders eliminated. You will not insert this provision in any letter order.

8. The requirement in paragraph 6, Section I, JAAF Procurement Circular No. 25 that price adjustment clauses should be used in negotiated procurement when the estimate of the low offerer, or the only offerer, exceeds the amount of the Government estimate by 5 percent or $5,000, whichever is lesser, is being revised to exclude construction from its application. Contracting officers will regard this provision as though it has no application to construction.

9. Authority is granted to deviate from the provisions of Orders and Regulations, and other directives of the Chief of Engineers, to the extent such provisions are rendered inconsistent with the policy and authority stated in references (a) (b) (c), paragraph 1 above, and as same may be inconsistent with the implementing instructions contained herein.

10. The existence of a state of national emergency, and the magnitude of our enlarged program, makes it highly imperative that the letting of contracts be accomplished efficiently, effectively, and to the best interest of the Government. The authorities delegated in this multiple letter of necessity relax some of the safeguards and reviews which normally surround contracting activities and consequently place greater responsibility on those exercising the additional authority. Continued use will be made, therefore, of all the required precautions to protect the interest of the Government, and, in addition, such further measures as you may deem necessary will be taken.

11. Although the objectives of the emergency program must be expeditiously attained, economy and efficiency cannot be ignored. It is the policy of the Department of the Army to obtain the most economical use of funds, and to secure the maximum construction, service, and work which can be obtained with those funds.

12. Effective immediately the following multiple letters are rescinded:

File No.	Date	Subject
ENGAC 161	Aug. 29, 1950	Emergency Construction and Rehabilitation of Posts, Camps, and Stations Required for the Expansion of the U. S. Armed Forces.
ENGAC 161	Aug. 29, 1950	Emergency Construction and Rehabilitation of Posts, Camps and Stations Required for the Expansion of the U. S. Armed Forces (Addressed to Army Commanders).
ENGAC 600.4	Oct. 6, 1950	Emergency Construction and Rehabilitation of Posts, Camps and Stations Required for Expansion of U. S. Armed Forces.

Lewis A. Pick,
LEWIS A. PICK,
Major General, Chief of Engineers.

Incls.
1 Memo U S of A, 18 Dec 1950
w/1 incl
2 C. P. Dir 51–FY 51
(for incls see above)

DISTRIBUTION: 25 copies to each addressee, plus 10 copies to Commanding General, The Engineer Center, Fort Belvoir, Va., 10 copies to Commanding Officer, Army Map Service, 10 copies to Legal Division, 10 copies to the Assistant Chief of Engineers for MS&P, 3 copies to Review Br., O Engr. Comptr.

DEPARTMENT OF THE ARMY,
OFFICE OF THE UNDER SECRETARY
Washington, D. C., 18 Dec. 1950.

Memorandum for: Assistant Chief of Staff, G–4.
Subject: Declaration of National Emergency and Broadening the Industrial Base of Procurement Programs.

Attention is invited to the attached determination authorizing procurement by negotiation during the present period of National Emergency proclaimed by the President of the United States. In connection with procurement undertaken hereafter during such National Emergency, the following policies shall be followed, in accordance with the direction of the Secretary of Defense.

1. Whenever procurement is made by negotiation and when consistent with the accomplishment of procurement objectives, quotations or proposals shall be solicited from such qualified sources as are deemed necessary to insure effective competition in order that the procurement be made to the best advantage of the Government, price and other factors considered.

2. Subject to such instructions as may be issued by the heads of procuring activities, formal advertising will continue to be used in appropriate cases. However, advertising will not be used when such use will adversely affect the acceleration of procurement or the broadening of the industrial base. Such instructions should of course be consistent, so as to prevent divergent practices by different procuring activities in similar cases.

3. It is essential, in complying with this memorandum, that contracts be spread across Industry as widely as possible in order to broaden the industrial base of our procurement program.

4. All procuring activities and agencies should pay particular attention to:

a. The greatest possible integration of current procurement contracts with the industrial mobilization program and the accepted schedules of production.

b. The equitable distribution of procurement contracts among the maximum number of competent suppliers. The concentration of contracts with a few leader suppliers is to be avoided unless the necessity therefor is clear.

c. The utilization of existing open industrial capacity to the maximum. Expansion of facilities should not be authorized when open capacity can be found. Whenever time permits, and in order to broaden the mobilization base, additional contractors should be utilized in lieu of multi-shift or overtime operation.

d. The fullest possible use of small business concerns.

e. The utilization in negotiation of competition and multiple awards, whenever possible.

f. The aggressive encouragement or requirement of subcontracting by prime contractors.

g. The provision of maximum incentive to the producer for the reduction of his costs.

h. The placement of contracts with a view to economies in the use of transportation facilities.

i. The availability of manpower in distressed employment areas or in areas of manpower shortages.

j. The reservation of special skills and abilities for the more difficult production tasks.

5. To the extent necessary, procurement procedures and practices should be modified to conform to the foregoing, and prior directives of this office inconsistent herewith are hereby modified. Particular attention should be paid to the caliber of personnel engaged in the negotiation of contracts.

(Signed) ARCHIBALD S. ALEXANDER,
Under Secretary of the Army.

1 Incl. Determination

DEPARTMENT OF THE ARMY

DETERMINATION AUTHORITY TO NEGOTIATE DURING PERIOD OF NATIONAL EMERGENCY

18 DEC. 1950.

1. A National Emergency having been declared by the President of the United States on 16 December 1950, I hereby determine in accordance with section 2 (c) (1) of the Armed Services Procurement Act of 1947, that it is necessary in the public interest that, to the extent provided in paragraph 2 hereof, purchases and contracts under said act be negotiated without formal advertising during the period of said National Emergency.

2. Accordingly, I hereby authorize the negotiation of purchases and contracts for supplies and services by the Department of the Army under Section 2 (c) (1) of the Armed Services Procurement Act of 1947 during the period of said National Emergency.

(Signed) ARCHIBALD S. ALEXANDER,
Under Secretary of the Army.

DEPARTMENT OF THE ARMY,
OFFICE OF THE ASSISTANT CHIEF OF STAFF, G–4, LOGISTICS,
Washington 25, D. C., 18 December 1950.

G4/E1 66037
(CP Dir 51—FY 1951)
Subject: Declaration of National Emergency and Broadening the Industrial Base of Procurement Program.
To: Chief of technical services; Commanding Generals, Continental Armies and the Military District of Washington; Commanding Generals, major oversea commands; and others, as indicated.

Distribution (a), (b), and (c) (See Incl to CP Dir 1—FY 1950.

1. Attention is invited to the attached copy of a memorandum from the Under Secretary of the Army, same subject, dated 18 December 1950 with attached copy of Determination—Authority to Negotiate during Period of National Emergency, dated 18 December 1950, which are published for information and guidance of all concerned.

2. All negotiated procurement initiated subsequent to receipt of this directive will be accomplished under ASPR 3–201 and JPR 4–102 and will cite as authority, Section 2 (c) (1), Armed Services Procurement Act of 1947 and Presidential Proclamation 2914. Negotiated procurement initiated prior to receipt of this directive, where such procurement has not resulted in a signed contract, may be accomplished in accordance with the appropriate paragraph of ASPR and JPR and may cite as authority, that statutory exception under which negotiations were started or may be accomplished under and may cite as authority, Section 2 (c) (1).

3. Authority is granted to deviate from the provisions of ASPR 1–301, 2–102, 3–101, and 3–203.2 to the extent such provisions are inconsistent with the policy and authority stated herein. Authority is also granted to modify statutory citations authorizing negotiation as contained in certain standard printed forms. The provisions of ASPR 3–307 and JPR 4–204 which require that a copy of Secretarial determinations with respect to negotiated contracts shall be sent to the General Accounting Office with the copy of the contract negotiated and executed thereunder, are waived for those contracts negotiated under authority of Section 2 (c) (1).

4. Subject to such instructions as may be issued by the heads of procuring activities, procurement may continue to be effected by formal advertising *only when time permits and delivery requirements are not jeopardized by such action* and only when:

a. Procuring standard commercial supplies or services; or

b. Adequate specifications or any other adequately detailed description of the required supplies or services are readily available; or

c. Procurement by formal advertising will expedite the consummation of the transaction or will obtain the required items more rapidly than by negotiation; or

d. There are no important factors to be considered in making the award, such as time of delivery, etc., other than price and it is anticipated that the supplies or services can be purchased more economically by formal advertising; or

e. The list of suppliers to be solicited is extensive, full competition is desired and purchase by formal advertising will be accomplished more efficiently and expeditiously than by negotiation; or

f. In such additional instances as are deemed to be necessary and as prescribed by the head of a procuring activity.

5. All other provisions of ASPR, JPR, and other Department of the Army directives, not inconsistent with the policy and authority set forth herein will remain in full force and effect. In this respect the requirements of JPR 5–200.3 (1) in connection with the approval of personal or professional service contracts and JPR 5–200.3 (5) in connection with the approval of awards for research and development contracts (see JAAF Proc Cir 25, 15 Dec 1950), remain in effect notwithstanding the fact that the contracts involved are negotiated under Section 2 (c) (1) rather than Sections 2 (c) (4), (5), or (11).

6. Copies of implementing instructions issued hereunder will be forwarded in triplicate to the Assistant Chief of Staff, G–4 (Attn.: Chief, Current Procurement Branch).

FOR THE ASSISTANT CHIEF OF STAFF, G–4:

P. M. SELEEN,
Colonel, GSC,
Chief, Current Procurement Branch.

1 Incl.
Memo fr USA, 18 Dec 50, w/a Incl.

DISTRIBUTION OF PREVIOUS CP DIRECTIVES:
CP Dir 49–(1), (b), and (c).
CP Dir 50–(a) and (b).

(Enclosure 3)

(Army Procurement Procedure)

1–604.7 *Negotiated Contracts in General.*

* * * * * * *

b. Heads of Technical Services.—Heads and acting heads of technical services are authorized to approve awards of negotiated contracts not included in paragraphs 1–604.1 through 1–604.6 above in amounts not in excess of $5,000,000. This authority may be redelegated by heads of technical services to the extent deemed necessary to personally selected members of their organizations. Such selected members are not authorized to redelegate this authority. Subject to any further instructions which may be issued by the chief of a technical service, contracts included in this subparagraph *b* amounting to less than $100,000 do not require approval by higher authority.

DEPARTMENT OF THE ARMY

OFFICE OF THE CHIEF OF ENGINEERS

Washington 25, D. C., 16 March 1951.

ENGAC 161

Subject: Declaration of National Emergency—Policy and Authority For Construction and Architect-Engineer Contracts.

To: Deputy Chief of Engineers
Assistant Chief of Engineers for Military Construction
Division Engineers
District Engineers

1. The purpose of this multiple letter is to consolidate into one document the present authorities of the Chief of Engineers with respect to awards of negotiated military contracts for architect-engineer and construction services; to effect a further redelegation of that authority; to restate the policy of the Corps of Engineers with respect to letting contracts by formal advertisement or by negotiation; and to state the circumstances under which the cost-plus-a-fixed-fee type of contract will be approved for use. The provisions hereof shall have no application whatsoever to projects financed from civil funds appropriated to the Corps of Engineers.

2. Attention is directed to the following references:

a. Current Procurement Directive 51–FY 1951, issued by the Assistant Chief of Staff, G–4, 18 December 1950, with inclosures thereto identified as a Memorandum from the Under Secretary of the Army to the Assistant Chief of Staff, G–4, 18 December 1950, subject; "Declaration of National Emergency and Broadening the Industrial Base of Procurement Programs" and a "Department of the Army Determination—Authority to Negotiate during Period of National Emergency," 18 December 1950, and signed by the Under Secretary of the Army, copies of which are inclosed (Inclosure 1).

b. JAAF Procurement Circular No. 25, 15 December 1950.

c. "Determination and Findings—Authorization to Procure Architectural and Engineering Services," signed by the Under Secretary of the Army, 15 February 1951, copy inclosed (Inclosure 2).

d. Copy of 1st Indorsement from the Assistant Chief of Staff, G–4, to the Chief of Engineers, 16 February 1951, file G4/E1 7281, increasing the award authority for construction contracts and the issuance of letter orders relating thereto (Inclosure 3).

3. Attention is directed to paragraph 4 of CP Directive 51 (reference 2a above) relative to procurement by advertising. The standards prescribed therein are further implemented as follows:

a. Construction Contracts.

(1) When plans and specifications are complete enough to permit lump sum bidding, the addressees of this multiple letter shall decide whether to negotiate or advertise, on the basis of the time element involved.

(2) Where the work can be defined by partial plans and specifications which are not sufficiently complete to permit formal advertising, negotiated lump sum or unit price contracts will be used, if practicable, in lieu of cost-plus-a-fixed-fee contracts.

(3) When the completion date is such that planning and building must start at the same time, such circumstances will be favorably considered by me to justify the use of cost-plus-a-fixed-fee contracts.

(4) When the project is located off-shore in areas where construction experience is lacking or otherwise of such a nature that makes it impracticable to estimate costs, such circumstances will be favorably considered by me to justify the use of the cost-plus-a-fixed-fee type of contract.

(5) Any contract to be negotiated on a fixed price basis should generally be accomplished by soliciting proposals from such qualified contractors as may be deemed necessary to insure effective competition, consistent with meeting the required completion date.

(6) When a contract is let by negotiation, letter order contracts should be issued in the first instance, when they will serve to expedite the completion of the work.

(7) All types of contracts must contain adequate requirements for maintaining sufficient plant, personnel, extra shifts, and overtime to insure completion within the specified time limits.

b. Architect-Engineer Contracts.

(1) Architect-engineer contracts, in all cases, will be negotiated.

(2) Principles determining the method of selection of architect-engineers, their negotiation and the instructions for use in determining architect-engineer fees are as set forth in paragraph 4106.15, Orders and Regulations as implemented by classified multiple letter ENGEY 161, 24 January 1951, subject: "Negotiation of Fees on Architect-Engineer Contracts."

c. In accordance with JIR 4–300, a determination and finding justifying the use of a cost-plus-a-fixed-fee contract must be made in each instance by the Chief of Engineers.

4. The following principles govern the selection of construction contractors and architect-engineers when the element of competition is lacking. They apply also to the selection of subcontractors under cost-plus-a-fixed-fee contracts, when the subcontract is subject to approval of the contracting officer:

a. The contractors must be fully capable of accomplishing the required design or construction work.

b. The contractor should be located in the general geographical area in which the work is to be performed. The guiding principle to be followed in determining the size of the geographical area is to make it large enough to provide a reasonable choice of contractors capable of handling the project. Unusually large or complicated projects thus generally will require consideration of firms within a large geographical area.

c. Avoid overloading any one firm.

d. The addressees of this multiple letter may select construction and architect-engineer contractors for contracts within the limitations of their delegated approval authority without further reference to this office. If the award of the proposed contract requires the approval of the Chief of Engineers or higher authority, recommendations as to the contractor to be used will be submitted to this office as now prescribed.

5. In accordance with the authority vested in me by the references cited in paragraph 2 above and subject to the limitations contained therein, I hereby redelegate to the above addressees without power of further delegation the authority to approve awards of negotiated military contracts as follows:

a. *District Engineers.*

1. Construction contracts in amounts not to exceed $5,000,000.

2. Architect-engineer contracts in amounts not to exceed $100,000. No distinction for award purposes is to be drawn between Title I (design) and/or Title II (supervision of construction) services.

3. Letter order contracts for construction when the estimated cost of the final contract does not exceed $5,000,000 provided that the maximum amount of any such letter order contract will not be in excess of 50% of the estimated cost of such final contract.

4. Letter order contracts for architect-engineer services not in excess of $50,000 and not in excess of 50% of the estimated cost of the final architect-engineer contract.

b. *Division Engineers.*

1. Construction contracts in amounts not to exceed $15,000,000.

2. Architect-engineer contracts in connection with construction, whether for Title I or Title II or both, where the cost of the architect-engineer contract does not exceed $500,000.

3. Letter order contracts for construction when the estimated cost of the final contract does not exceed $15,000,000 provided that the maximum amount of any such letter order contract will not be in excess of 50% of the estimated cost of such final contract.

4. Letter order contracts for architect-engineer services not in excess of $250,000 and not in excess of 50% of the estimated cost of the final architect-engineer contract.

c. *Deputy Chief of Engineers and Assistant Chief of Engineers for Military Construction.*—The same authorities as granted to Division Engineers in subparagraph *b* above.

d. *Additional Delegations.*—Requests for delegations to District Engineers in excess of their authority as delegated herein, up to the limits herein authorized to Division Engineers, will be approved for individual District Engineers as recommended by the appropriate Division Engineer. No limitations with respect to approval of contract awards may be imposed by Division Engineers upon the authority delegated hereunder to District Engineers

without the prior approval of the Chief of Engineers. Contract awards in excess of the amounts delegated hereunder will require authorization from the Under Secretary of the Army. Requests therefor will be submitted to this office in the same detail and follow the same procedures as presently prescribed by JPR, Orders and Regulations, and implementing directives.

6. Attention is directed to paragraph 6, JAAF Procurement Circular No. 25, providing that a 7% fixed fee limitation for all cost-plus-a-fixed-fee contracts should be made a condition of each applicable letter order. Reference is made also to the provision therein that price adjustment clauses should be used in negotiated procurement when the estimate of the low offerer, or the only offerer, exceeds the amount of the Government estimate by 5% or $5,000, whichever is lesser. These requirements are being revised by the Assistant Chief of Staff, G–4. In the meantime they shall have no application to the subject matter of this multiple letter.

7. Report of all contracts and letter order contracts approved under this authority shall be made on DD Form 350—"Individual Procurement Action Report", (Reports Control Symbol DD–MB–245) and shall be identified by entry in Part B, Item 24—"Remarks", of the following statement: "Approved under delegation of authority granted by USA, 15 February 1951". In addition to the foregoing, the report which covers the last Individual Procurement Action taken under this authority each month, shall contain the following:

"Final Report (*month*), 195—. Previously approved under this authority and forwarded during (*month*): (*List number of all Individual Procurement Action Reports negotiated under this delegation of authority and previously submitted during the month*)"

Report as to letter order contracts issued shall show also, where applicable, "Funds obligated $ ", *and shall indicate only funds obligated by the letter order contract;* however, it is desired that the report of the letter order contract contain an additional statement under item 24, as follows: "It is estimated that the total construction cost will be $." In the event that a letter order contract is reported, stating obligation of funds in accordance with the foregoing, subsequent report upon formalization of the contract will include the total amount of the contract, less the amount of the letter order contract.

In connection with architect-engineer contracts, the Under Secretary of the Army has requested a monthly report, for which a reports control symbol is being obtained, to be submitted in time so as to reach the Office of the Assistant Chief of Staff, G–4, (Attn: Chief, Current Procurement Branch) not later than the 19th of each month, covering awards of all architect-engineer contracts approved during the preceding calendar month under this and previous delegations of authority. Such reports will be submitted in triplicate and will include the following information:

a. Names and addresses of architect-engineer contractors.

b. Brief description of the services.

c. Type of contract (cost-plus-a-fixed fee, fixed price, etc.).

d. Total contract price in case of lump sum or estimated cost-plus-a-fixed fee in case of CPFF.

e. Fixed fee in case of CPFF or profit item if lump sum (item No. 7 of 7 item breakdown; see paragraph 4106.15, Orders and Regulations, and percentage this item represents when compared to total of other 6 AE contract cost items.

f. Estimated construction costs upon which AE negotiations were based, broken down between utilities and structures.

g. Date of approval.

h. Approving officer (Title, District or Division). Such report will be submitted so as to reach this office, not later than the 12th of every month and will cover awards approved during the preceding month. The foregoing reporting requirements do not alter current procedures outlined in existing multiple letters which are not specifically superseded hereby.

8. Authority is granted to deviate from the provisions of Orders and Regulations, and other directives of the Chief of Engineers, but only to the extent such provisions are rendered inconsistent with the policy and authority stated in the references listed in paragraph 2 above, and as same may be inconsistent with the implementing instructions contained herein.

9. The existence of a state of national emergency, and the magnitude of our enlarged program, makes it highly imperative that the letting of contracts be accomplished efficiently, effectively, and to the best interest of the Government. The authorities delegated in this multiple letter of necessity relax some of the

safeguards and reviews which normally surround contracting activities and consequently place greater responsibility on those exercising the additional authority. Continued use will be made, therefore, of all the required precautions to protect the interest of the Government, and, in addition, such further measures as you may deem necessary will be taken.

10. The authorization granted herein to approve contracts for architectural and engineering services shall not extend beyond 30 June 1951. The following multiple letters previously signed by me on this subject are hereby superseded:

Symbol and file No.	Date	Subject
ENGAC	Dec. 28, 1950	Declaration of National Emergency—Policy and Authority for Construction and Architect-Engineer Contracts.
ENGAC 161	Jan. 23, 1951	Delcaration of National Emergency—Authorization to Procure Architectural and Engineering Services.

Lewis A. Pick,
LEWIS A. PICK,
Major General, Chief of Engineers.

3 Incls:
1. CP Dir 51, FY 1951, 18 Dec 50, w/1 Incl
2. Determination and Finding, 15 Feb 51
3. 1st Ind. from ACofS, G–4, 16 Feb 51

DISTRIBUTION: 25 copies to each Div and Dist Engr; 5 copies to Dep CofEngrs and Asst CofEngrs for Mil Constr; 10 copies to Asst CofEngrs for MS&P, CG, The Engineer Center and Army Map Service; 5 copies to Review Branch, OEngr Comptr, and ERDL; 25 copies to Legal Div and Asst CofEngrs for Mil Constr, Attn: Executive Office.

DEPARTMENT OF THE ARMY,
OFFICE OF THE ASSISTANT CHIEF OF STAFF, G–4, LOGISTICS,
Washington 25, D. C., 18 December 1950.

G4/E1 66037
(CP Dir 5, FY 1951)
Subject: Declaration of National Emergency and Broadening the Industrial Base of Procurement Program.
To: Chief of technical services; Commanding General, Continental Armies and the Military District of Washington; Commanding Generals, major oversea Commands; and others as indicated. Distribution (a), (b), and (c). (See Incl to CP Dir 1, FY 1950.)

1. Attention is invited to the attached copy of a memorandum from the Under Secretary of the Army, same subject, dated 18 December 1950 with attached copy of Determination—Authority to Negotiate during Period of National Emergency, dated 18 December 1950, which are published for information and guidance of all concerned.

2. All negotiated procurement initiated subsequent to receipt of this directive will be accomplished under ASPR 3–201 and JPR 4–102 and will cite as authority, Section 2 (c) (1), Armed Services Procurement Act of 1947 and Presidential Proclamation 2914. Negotiated procurement initiated prior to receipt of this directive, where such procurement has not resulted in a signed contract, may be accomplished in accordance with the appropriate paragraph of ASPR and JPR and may cite as authority, that statutory exception under which negotiations were started or may be accomplished under and may cite as authority, Section 2 (c) (1).

3. Authority is granted to deviate from the provisions of ASPR 1–301, 2–102, 3–101, and 3–203.2 to the extent such provisions are inconsistent with the policy and authority stated herein. Authority is also granted to modify statutory citations authorizing negotiations as contained in certain standard printed forms. The provisions of ASPR 3–307 and JPR 4–204 which required that a copy of Secretarial determinations with respect to negotiated contracts shall be sent to the General Accounting Office with the copy of the contract negotiated and executed thereunder, are waived for those contracts negotiated under authority of Section 2 (c) (1).

4. Subject to such instructions as may be issued by the heads of procuring activities, procurement may continue to be effected by formal advertising *only when time permits and delivery requirements are not jeopardized by such action* and only when:

a. Procuring standard commercial supplies or services; or

b. Adequate specifications or any other adequately detailed description of the required supplies or services are readily available; or

c. Procurement by formal advertising will expedite the consummation of the transaction or will obtain the required items more rapidly than by negotiation; or

d. There are no important factors to be considered in making the award, such as time of delivery, etc., other than price and it is anticipated that the supplies or services can be purchased more economically by formal advertising; or

e. The list of suppliers to be solicited is extensive, full competition is desired and purchase by formal advertising will be accomplished more efficiently and expeditiously than by negotiation; or

f. In such additional instances as are deemed to be necessary and as prescribed by the head of a procuring activity.

5. All other provisions of ASPR, JPR, and other Department of the Army directives, not inconsistent with the policy and authority set forth herein will remain in full force and effect. In this respect the requirements of JPR 5–200.3 (1) in connection with the approval of personal or professional service contracts and JPR 5–200.3 (5) in connection with the approval of awards for research and development contracts, (see JAAF Proc. Cir. 25, 15 Dec. 1950), remain in effect notwithstanding the fact that the contracts involved are negotiated under Section 2 (c) (1) rather than Sections 2 (c) (4), (5), or (11).

6. Copies of implementing instructions issued hereunder will be forwarded in triplicate to the Assistant Chief of Staff, G–4 (Attn: Chief, Current Procurement Branch).

FOR THE ASSISTANT CHIEF OF STAFF, G–4:

P. M. SELEEN,
Colonel, GSC, Chief, Current Procurement Branch.

1 Incl: Memo fr USA, 18 Dec 50, w/1 Incl.
DISTRIBUTION OF PREVIOUS CP DIRECTIVES:
CP Dir 49—(a), (b), and (c).
CP Dir 50—(a) and (b).

DEPARTMENT OF THE ARMY,
OFFICE OF THE UNDER SECRETARY,
Washington, D. C., 18 Dec. 1950.

Memorandum for: Assistant Chief of Staff, G–4

Subject: Declaration of National Emergency and Broadening the Industrial Base of Procurement Programs.

Attention is invited to the attached determination authorizing procurement by negotiation during the present period of National Emergency proclaimed by the President of the United States. In connection with procurement undertaken hereafter during such National Emergency, the following policies shall be followed, in accordance with the direction of the Secretary of Defense.

1. Whenever procurement is made by negotiation and when consistent with the accomplishment of procurement objectives, quotations or proposals shall be solicited from such qualified sources as are deemed necessary to insure effective competition in order that the procurement be made to the best advantage of the Government, price and other factors considered.

2. Subject to such instructions as may be issued by the heads of procuring activities, formal advertising will continue to be used in appropriate cases. However, advertising will not be used when such use will adversely affect the acceleration of procurement or the broadening of the industrial base. Such instructions should of course be consistent, so as to prevent divergent practices by different procuring activities in similar cases.

3. It is essential, in complying with this memorandum, that contracts be spread across industry as widely as possible in order to broaden the industrial base of our procurement program.

4. All procuring activities and agencies should pay particular attention to:

a. The greatest possible integration of current procurement contracts with the industrial mobilization program and the accepted schedules of production.

b. The equitable distribution of procurement contracts among the maximum number of competent suppliers, The concentration of contracts with a few leader suppliers is to be avoided unless the necessity therefor is clear.

c. The utilization of existing open industrial capacity to the maximum. Expansion of facilities should not be authorized when open capacity can be found. Whenever time permits, and in order to broaden the mobilization base, additional contractors should be utilized in lieu of multi-shift or overtime operation.

d. The fullest possible use of small-business concerns.

e. The utilization in negotiation of competition and multiple awards, whenever possible.

f. The aggressive encouragement or requirement of subcontracting by prime contractors.

g. The provision of maximum incentive to the producer for the reduction of his costs.

h. The placement of contracts with a view to economics in the use of transportation facilities.

i. The availability of manpower in distressed employment areas or in areas of manpower shortages.

j. The reservation of special skills and abilities for the more difficult production tasks.

5. To the extent necessary, procurement procedures and practices should be modified to conform to the foregoing and prior directives of this office inconsistent herewith are hereby modified. Particular attention should be paid to the caliber of personnel engaged in the negotiation of contracts.

(Signed) ARCHIBALD S. ALEXANDER,
Under Secretary of the Army.

1 Incl.: Determination.

DETERMINATION AND FINDINGS

AUTHORIZATION TO PROCURE ARCHITECTURAL AND ENGINEERING SERVICES

FEBRUARY 15, 1951.

1. Under the provisions of section 601, Defense Appropriation Act, 1951 (P. L. 759, 81st Cong.), I determine that the existing facilities of the Department of Defense for Architectural and Engineering Services are inadequate, and that it will be advantageous to the national defense to procure by contract the services of architects and engineers or organizations thereof in accordance with section 15 of the act of 2 August 1946 (5 U. S. C. 55a), in connection with public works or utility projects for national defense purposes to be performed under the supervision of the Corps of Engineers. Accordingly, where the contract for services of architects and engineers or organizations thereof does not exceed $500,000. I hereby authorize the Chief of Engineers, and such other officers and individuals as he may personally designate, to procure, under the provisions of section 15 of the act of 2 August 1946 (5 U. S. C. 55a), such services of architects and engineers or organizations thereof as may be necessary in connection with public works or utility projects for national defense purposes to be performed under the supervision of the Corps of Engineers, at the following rate of compensation:

a. For Organizations.—The rate of profit in fixed-price contracts and the rate of fixed-fee in cost-plus-a-fixed-fee contracts shall be the minimum which can be negotiated, and shall not exceed the limitations as to maximum fees contained in applicable statutes, such as Section 4b, Public Law 413, 80th Congress, and the Act of August 7, 1939 (5 U. S. C. 221).

b. For Individuals.—Individuals shall be paid not in excess of $50 per day. There may also be paid the travel expenses of individuals, including actual transportation and per diem in lieu of subsistence while traveling from their homes or places of business to official duty station and return, as may be authorized by law.

2. Contracts and awards for architect and engineer services approved by the Chief of Engineers or the officers or individuals personally designated by him so to do in accordance with the preceding authorization shall comply with the following conditions:

a. All contracts will contain required standard clauses as well as such standard optional clauses as may be necessary to fully protect the interests of the Government.

b. Standard price redetermination clauses shall be included in all fixed-price contracts wherein no data are available to indicate reasonableness of price. Government estimates, independently prepared, may be used to determine reasonableness of price.

3. The authorization herein granted shall not extend beyond 30 June 1951. Nothing herein stated shall be construed to eliminate or waive any of the requirements of Section 616 of Public Law 759 as amended by Section 101 of Public Law 843, 81st Congress, in so far as such requirements may be applicable. Contracts for services of architects and engineers or organizations thereof in connection with projects for which the costs exceed $500,000 shall be submitted to me for approval under present procedures.

4. As of this date this Determination and Findings supersedes the Determination and Findings on this subject signed by me on 18 January 1951.

/s/ Archibald S. Alexander,
ARCHIBALD S. ALEXANDER,
Under Secretary of the Army.

DEPARTMENT OF THE ARMY, DETERMINATION AUTHORITY TO NEGOTIATE DURING PERIOD OF NATIONAL EMERGENCY

18 DEC. 1950.

1. A National Emergency having been declared by the President of the United States on 16 December 1950, I hereby determine in accordance with section 2 (c) (1) of the Armed Services Procurement Act of 1947, that it is necessary in the public interest that, to the extent provided in paragraph 2 hereof, purchases and contracts under said act be negotiated without formal advertising during the period of said National Emergency.

2. Accordingly, I hereby authorize the negotiation of purchases and contracts for supplies and services by the Department of the Army under section 2 (c) (1) of the Armed Services Procurement Act of 1947 during the period of said National Emergency.

(Signed) ARCHIBALD S. ALEXANDER,
Under Secretary of the Army.

[First endorsement]

OFFICE, A. C. OF S, G–4, DEPT. OF THE ARMY,
Washington 25, D. C., 16 Feb. 1951.

To: Chief of Engineers.

1. By direction of the Under Secretary of the Army, there is hereby granted to the Chief of Engineers, authority to approve the following without reference to this office:

a. Construction contracts or awards in amounts in excess of $5,000,000 but not exceeding $15,000,000.

b. Letter orders in the maximum amount of $7,500,000 provided that no such letter order will be in excess of fifty percent (50%) of the total estimated contract amount.

2. The Chief of Engineers is authorized to redelegate the above authority to the extent deemed necessary to personally selected members of his organization. Such selected members are not authorized to redelegate this authority.

3. Report of all contracts and letter orders approved under this authority shall be made on DD Form 350—Individual Procurement Action Report and shall be identified by entry in Part B, Item 24—Remarks, of the following statement: "Approved under delegation of authority granted by USA, 15 February 1951." In addition to the foregoing, the report which covers the last Individual Procurement Action taken under this authority each month, shall contain the following:

"Final Report (*month*), 195–. Previously approved under this authority and forwarded during (*month*): (List numbers of *all Individual Procurement Action Reports negotiated under this delegation of authority and previously submitted during the month*)."

Report as to Letter Orders issued shall show also, where applicable, "Funds obligated $," *and shall indicate only funds obligated by the Letter Order.* In the event that a Letter Order is reported, stating obligation of funds in accordance with the foregoing, subsequent report upon formalization of the contract will include the total amount of the contract, less the amount of the Letter Order.

4. The authority granted in paragraph 1 above shall be construed as a deviation from such parts of JPR 5–200.3 (6), JPR 4–301 (4), APP 3–408 and APP 1–604, as it may be in conflict. No deviation is granted from the conditions governing use of letter orders set forth in JPR 4–301 (4) (a) and (b).

FOR THE ASSISTANT CHIEF OF STAFF, G–4:

/s/ P. M. Seleen,
P. M. SELEEN,
Colonel, GSC,
Chief, Current Procurement Branch.

Incl #3.

(Army procurement procedure)

1–604.3 *Construction and Rehabilitation of Installations.*

* * * * * * *

b. Chief of Engineers.—Awards of negotiated contracts entered into by the Chief of Engineers for construction and rehabilitation of installations for use in connection with the program for expansion of the United States Armed Forces will be approved by the Chief of Engineers, or personally selected members of his organization designated by him so to do, when the amount involved does not exceed $15,000,000. Such selected members are not authorized to redelegate this authority. Subject to any further instructions which may be issued by the Chief of Engineers, awards of contracts included in this subparagraph *b* amounting to less than $100,000 do not require approval of higher authority.

1–604.4 *Architect-Engineer Contracts.*

a. Awards of Architect-Engineer contracts under which the Government is to acquire a finished design job or engineering report, including all required drawings, plans, and specifications, and under which there is little, if any, direct Government supervision of the contractor, and the fee is based upon the results to be accomplished, will be submitted to the Chief, Purchases Branch, Assistant Chief of Staff, G–4, Department of the Army, for approval, *except* that until 30 June 1952 (i) the Chief of Engineers and such other officers and individuals as he may personally designate to procure such services, under the provisions of Section 15 of the Act of 2 August 1946 (5 U. S. Code 55a), may approve such awards when the contract amount does not exceed $500,000, and (ii) the following major oversea commanders: Commanding General, United States Forces, Austria, and such other officers and individuals, as each may personally designate, to procure such services, under the provisions of the Act of 2 August 1946, supra, may approve such awards when the contract amount does not exceed $300,000.

(Enclosure 4)

DISPOSITION FORM

INCREASED DELEGATION OF AUTHORITY WITH RESPECT TO CONSTRUCTION AND ARCHITECT-ENGINEER CONTRACTS

G4/E1 61471
Chief of Engineers, G–4

3 JANUARY 1952.
Lt. Col. GMFreeman/pf/74175.

1. Reference is made to the delegation of authority contained in APP 1–604.10.

2. By direction of the Under Secretary of the Army, the referenced delegation is amended as set forth below.

3. The Chief of Engineers and such delegates as are personally selected by him, without power of further delegation, are authorized to deviate from the provisions of APP 1–604.10, as amended, *Modification of Contracts*, as follows:

a. Authority is granted, without reference to Assistant Chief of Staff, G–4, to enter into modifications (supplemental agreements) to Architect-Engineer contracts and contracts for the construction and rehabilitation of installations occasioned by price adjustment clauses, subject to the following conditions:

(1) The ceiling price is not exceeded.

(2) The ultimate price does not exceed the target price by more than twenty-five percent (25%).

b. Authority is granted, without reference to Assistant Chief of Staff, G–4, to enter into Modifications (supplemental agreements) to contracts for the construction and rehabilitation of installations for the procurement of work beyond the general scope of the contract, in amounts not to exceed the estimated total of

$15,000,000, over and above the basic contract amount, irrespective of whether or not the basic contracts were approved by Assistant Chief of Staff, G–4, subject to the following conditions:

(1) The extra work is applicable to the same basic project.

(2) The price of the extra work will be consistent with the price in the original contract, with applicable reductions therefrom, commensurate with:

(a) Increased quantities.

(b) Increased efficiency and acquisition of "know-how" by the contractor and subcontractors.

(c) Removal of risk to the contractor and subcontractors through experience gained during basic contract.

(d) Elimination or reduction of previously amortized starting costs.

(3) All other terms and conditions of the contract remain unchanged.

4. The Chief of Engineers and such delegates as are selected by him, with power of further delegation, are authorized to deviate from the provisions of APP 1–604.10, as amended, *Modification of Contracts*, as follows:

a. Authority is granted, without reference to Assistant Chief of Staff, G–4, to enter into modifications (change orders) to Architect-Engineer contracts and contracts for the construction and rehabilitation of installations occasioned by making changes in the drawings and/or specifications within the general scope of the contract, subject to the following conditions:

(1) There is no change in the general scope of the contract.

(2) All other terms and conditions of the contract remain unchanged.

(3) That this authority applies to all contracts, irrespective of the amount of the basic contract; the amount of the increase or decrease; or whether or not the basic contracts were approved by Assistant Chief of Staff, G–4.

5. Nothing stated herein will be construed to modify present delegations of authority with respect to Title II of the First War Powers Act, 1941 (30 U. S. C. App. Sec. 811), as amended by Public Law 921, 81st Congress and Executive Order No. 10210, dated 2 February 1951.

FOR THE ASSISTANT CHIEF OF STAFF, G–4:

ALBERT FREGOSI,
Colonel, GS, Chief, Purchases Branch,
Procurement Division.

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., 31 March 1952.

ENGAC 161

Subject: Declaration of National Emergency—Policy and Authority for Construction and Architect-Engineer Contracts.

To: Deputy Chief of Engineers
Assistant Chief of Engineers for Military Construction
Deputy Assistant Chief of Engineers for Military Construction
Division Engineers
District Engineers

1. Paragraph 5 of multiple letter ENGAC 161, 16 March 1951, subject as above, is rescinded and the following is substituted therefor:

"5. Pursuant to the authority vested in me by the references cited in paragraph 2 above, and as amended by Comment No. 1 of Disposition Form G4/E1 61471, 3 January 1952, subject, "Increased Delegation of Authority with Respect to Construction and Architect-engineer Contracts," from the Chief, Purchases Branch, Procurement Division, Assistant Chief of Staff, G–4, and subject to the limitations contained in the above references, I hereby redelegate to the above addresses, without power of further delegation, the authority to approve awards of negotiated military contracts, supplemental agreements and change orders pertaining thereto as follows:

"*a. District Engineers.*

"1. *Construction Contracts.*

"(a) Principal contracts in amounts not to exceed $5,000,000.

"(b) Supplemental agreements in amounts not to exceed a total of $5,000,000 over and above the cumulative amount resulting from the last award approved by the Division Engineer, subject to the conditions set forth in c. 2 below. (This delegation grants authority to the addressees to approve awards, not to exceed an aggregate of $5,000,000 after each required approval of an award by the Division Engineer.)

"2. *Architect-Engineer Contracts.*

"(a) Principal contracts in amounts not to exceed $100,000. No distinction, for award purposes, is to be drawn between Title I (Design) and/or Title II (Supervision of construction) services.

"(b) Supplemental agreements in accordance with c. 1, only.

"3. *Letter Order Contracts.*

"(a) Letter order contracts for construction when the estimated cost of the final contract does not exceed $5,000,000, provided that the maximum amount of such letter order contract will not be in excess of 50% of the estimated cost of the final construction contract.

"(b) Letter order contracts for architect-engineer services not in excess of $50,000, and not in excess of 50% of the estimated cost of the final architect-engineer contract.

"*b. Division Engineers.*

"1. *Construction Contracts.*

"(a) Principal contracts in amounts not to exceed $15,000,000.

"(b) Supplemental agreements in amounts not to exceed a total of $15,000,000, over and above the cumulative amount resulting from the last award approved by the Assistant Chief of Staff, G–4, subject to the conditions set forth in c. 2, below. (This delegation grants authority to addressees to approve awards not to exceed an aggregate of $15,000,000 after each required approval of an award by G–4.)

"2. *Architect-Engineer Contracts.*

"(a) Principal contracts in amounts not to exceed $500,000 whether for Title I or Title II services or both.

"(b) Supplemental agreements in accordance with c. 1, only.

"3. *Letter Order Contracts.*

"(a) Letter order contracts for construction when the estimated cost of the final contract does not exceed $15,000,000 provided that the maximum amount of any such letter order contract will not be in excess of 50% of the estimated cost of the final construction contract.

"(b) Letter order contracts for architect-engineer services not in excess of $250,000, and not in excess of 50% of the estimated cost of the final architect-engineer contract.

"*c. District and Division Engineers.*

"1. Supplemental agreements to construction and architect-engineer contracts, occasioned by * price adjustment clauses, subject to the following conditions.

"(a) The ceiling price, if any, is not exceeded."

"(b) The ultimate price does not exceed the target price by more than twenty-five percent (25%).

"2. The authority for the approval of construction *supplemental agreements* other than those in c. 1, above, is subject to the following conditions:

"(a) The extra work is applicable to the same basic contract.

"(b) The price of the extra work will be consistent with the prices in the original contract, with applicable reduction therefrom, commensurate with:

"(1) increased quantities;

"(2) increased efficiency and acquisition of 'know-how' by the contractor and sub-contractor;

"(3) removal of risk to the contractor and sub-contractor through experience gained during basic contract;

"(4) elimination or reduction of previously amortized starting costs.

"(c) All other terms and conditions of the contract remain unchanged.

"3. *Change Orders* to architect-engineer and construction contracts occasioned by making changes in the drawings and/or specifications within the general scope of the contract, subject to the following conditions:

"(a) There is no change in the general scope of the contract.

"(b) All other terms and conditions of the contract remain unchanged.

"(c) Regardless of the amount of the basic contract; the increase or the decrease; or whether or not the basic contract was approved by higher authority.

*Neither construction nor architect-engineer contracts, as a rule contain price adjustment clauses. The above authority and limitations were granted by G–4 in the event such clauses were present in the above type of contract.

"d. Deputy Chief of Engineers, Assistant Chief of Engineers for Military Construction, and Deputy Assistant Chief of Engineers for Military Construction.

"The same authorities as granted to Division Engineers in subparagraphs *b* and *c* above."

"e. Additional delegations.

Requests for delegations to District Engineers in excess of their authority as delegated herein, up to the limitation herein authorized to Division Engineers, will be approved for individual District Engineers as recommended by the appropriate Division Engineer. No limitations with respect to approval of contract awards may be imposed by Division Engineers upon the authority delegated hereunder to District Engineers without the prior approval of the Chief of Engineers. Contract awards in excess of the amounts delegated hereunder will require authorization from the Under Secretary of the Army. Requests therefor will be submitted to this office in the same detail and follow the same procedures as presently prescribed in APP, Orders and Regulations, and implementing directives."

2. The authorities herein granted, supplementing those in the multiple letter mentioned in paragraph 1 above, are effective as of 7 January 1952.

Lewis A. Pick,
LEWIS A. PICK,
Lieutenant General, Chief of Engineers.

DISTRIBUTION:
Distribution A
3 copies to Review Branch, OEngr Comptroller
20 copies to Legal Division
30 copies to Assistant Chief of Engineers for Military Construction
10 copies to Budget and Fiscal Account Div. and Engineer Inspector General
2 copies to Mr. Frank C. Anthony, Ohio River Division, and for information
5 copies to District Engineer, Okinawa District and
10 copies to CIC, Far East Command, Attention: Engineer
5 copies to Officer-in-Charge, Rear Echelon, Middle East District
5 copies to Officer-in-Charge, Rear Echelon, East Atlantic District
5 copies to Officer-in-Charge, Rear Echelon, U. S. Engineer Group, Ankara

(Enclosure 5)

6 MARCH 1951.

ENGAC-301
Subject: Authority to award advertised contracts and modifications thereto.
To: (All Division Engineers by individual letters)

Pending revision of Part I, Chapter VII, O & R, authority is granted to District and Division Engineers to award advertised contracts and modifications thereto, on Military work, subject to the same limitations which apply to negotiated contracts and which are contained in multiple letter dated 28 December 1950, Subject: Declaration of National Emergency—Policy and Authority for Construction and Architect-Engineer Contracts.

BY ORDER OF THE CHIEF OF ENGINEERS:

CRAIG SMYSER,
Lt. Col., Corps of Engineers, Executive.

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., 2 April 1951.

ENGAC 161
Subject: Delegation of Authority to Make Determinations and Findings in Support of Cost-Reimbursement Type Contracts.
To: Deputy Chief of Engineers
Assistant Chief of Engineers for Military Construction
Division Engineers
District Engineers
Chief, Chicago Procurement Office, CE
Commanding Officers, Engineer Depots
Engineer Supply Officers, General Depots

1. Attention is directed to the following:

a. Disposition Form G4/E1 948, from the Assistant Chief of Staff, G–4, 16 March 1951, Subject: "Delegation of Authority to Make Determinations and

Findings in Support of Cost-Reimbursement Type Contracts," copy of which is inclosed.

b. Multiple letter ENGAC 161, 16 March 1951, Subject: "Declaration of National Emergency—Policy and Authority for Construction and Architect-Engineer Contracts."

2. In accordance with the authority delegated to me by the Under Secretary of the Army, as indicated in the inclosed Disposition Form, I hereby redelegate to the addresses of this multiple letter, without power to further redelegate, the authority to make the written determinations and findings relating to the use of cost type contracts described and required by Sections 4 and 7 (c) of Public Law 413, 80th Congress, and paragraphs 3–303b, 3–405, and 3–406 of the Armed Services Procurement Regulations.

3. The addresses hereof may personally select one alternate who will be empowered to make the required determination during periods of official absence of the delegate for whom he has been selected as alternate. The name of the individual so selected should be submitted to this office Attention: ENGAC, so that I may make a delegation directly to such person. Neither delegates nor their alternates are authorized to redelegate this authority.

4. Attention is directed to paragraph 3–304 Army Procurement Procedure prohibiting the making of determinations and findings relative to the use of a cost of a cost-plus-a-fixed-fee contract by a contracting officer. In recognition of the fact that the chiefs of field procuring activities of the Corps of Engineers are contracting officers by virtue of their position, the Assistant Chief of Staff, G–4, Logistics, has agreed to waive this restriction so as to permit the making of determinations and findings by the above addressees notwithstanding the fact that they are also contracting officers. In this connection the quoted paragraph 2 of the memorandum from the Under Secretary of the Army, contained in the inclosed Disposition Form is being revised to read as follows:

"2. Subject to the limitation imposed by the provisions of APP 3–304 pertaining to determinations by a Contracting Officer, except that such limitation shall not operate to prevent the exercise of this authority by the Chief of a Field Procuring Activity who may also have been appointed a Contracting Officer, Heads of Procuring Activities may also personally select one (1) alternate for each delegate listed above, provided, however, that such alternate will be empowered to make the required determination only during periods of official absence of the delegate for whom he has been selected as alternate."

5. Nothing herein stated shall be construed to eliminate or waive any requirement of law or regulation governing the determination to be made or as to preservation of findings and file of same with the General Accounting Office.

6. Attention is directed to the fact that incentive type contracts are not included in this delegation. This delegation is applicable only to military construction, architect-engineer services, and time and material contracts (See APP 3–304(b)).

7. Paragraph 3e of multiple letter ENGAC 161, 16 March 1951, Subject: "Declaration of National Emergency—Policy and Authority for Construction and Architect-Engineer Contracts" (reference 1b above) is rescinded.

Lewis A. Pick,
LEWIS A. PICK,
Major General, Chief of Engineers.

1 Incl D/F G4/E1 948, 16 Mar 51 copy.

DISTRIBUTION. 5 copies to Deputy Chief of Engineers; 5 copies to Asst C of Dngrs for Mil Constr, Attn: Executive Office; 10 copies to each other addressee; 5 copies to Review Branch, OEngr Comptr; 5 copies to Asst CofEngrs for MS&P; 20 copies to Legal Div.

DISPOSITION FORM

Security Classification (if any)----------

FILE NO. G4/E1 948. SUBJECT: Delegation of Authority to Make Determinations and Findings in Support of Cost-Reimbursement-Type Contract

To Chief of Ordnance
Chief of Engineers
Chief of Transportation
Chief Chemical Officer
Chief Signal Officer
The Surgeon General
The Quartermaster General

FROM: G–4. DATE: 16 March 1951. COMMENT NO. 1
Major Drezmal /55820

1. The Under Secretary of the Army has this day issued the following delegation of authority to make determinations and findings in support of cost-reimbursement-type contracts:

"1. Pursuant to the provisions of Section 10, Public Law 413, 80th Congress, and paragraph 4–300 of Joint Procurement Regulations, Heads of Procuring Activities, during the period of the National Emergency declared by the President on 16 December 1950, are hereby authorized to delegate to Assistant Chiefs, Deputy Chiefs and Chiefs of Staff of such Procuring Activities, and to Chiefs of Field Procuring Activities, authority to make the written findings and determinations relating to the use of cost type contracts described and required by Sections 4 and 7 (c), Public Law 413, 80th Congress, and paragraphs 3–303b, 3–405 and 3–406, Armed Services Procurement Regulation.

"2. Subject to the limitation imposed by the provisions of Army Procurement Procedures, 15 March 1951, pertaining to determinations by a Contracting Officer, Heads of Procuring Activities may also personally select one (1) alternate for each delegate listed above, provided, however, that such alternate will be empowered to make the required determination only during periods of official absence of the delegate for whom he has been selected as alternate.

"3. Neither delegates nor their alternates shall be authorized to redelegate this authority.

"4. Nothing herein stated shall be construed to eliminate or waive any requirement of law or regulation governing the determination to be made or as to preservation of findings and filing of same with the General Accounting Office."

2. The above quoted delegation is effective as of this date and is furnished for such action as you may wish to take immediately. It will subsequently be published in an appropriate procurement Circular. Attention is invited to the fact that incentive type contracts are not included in this delegation.

FOR THE ASSISTANT CHIEF OF STAFF, G–4: /s/ P. M. Seleen,
P. M. SELEEN,
Colonel, GSC, Chief, Current Procurement Branch.

---

3 MAY 1951

ENGMY
All Division Engineers
From ENGMY

Reference is made to par. two of multiple ltr. two, Apr. 19, 1951, subject: "Delegation of authority to make determinations and findings in support of cost reimbursement-type contracts." Inability at many projects to establish criteria, obtain real estate, etc., has enabled you to advance design further than contemplated when the referenced multiple ltr. was issued. In view of advantages that accrue through use of lump-sum contracts, it is my desire that you obtain prior clearance from this office before you make any commitment to use cost-plus-a-fixed-fee contracts. This preliminary clearance will not relieve you from responsibility of making requisite determinations and findings to use cost-type contract as set forth in above-referenced multiple ltr. Clearances from this office may be obtained by teletype request which should be supported with sufficient information and data. In urgent cases the matter may be handled informally by telephone, in which event it will be incumbent upon office requesting telephonic clearance to submit written requests for confirmation. I reemphasize my desire to use advertised lump-sum contracts to greatest extent practicable. Notify districts ENGMY 2469.

/s/ LEWIS A. PICK.

IMMEDIATE ACTION

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., 12 April 1951.

ENGAC 161

Subject: Declaration of National Emergency and Broadening the Industrial Base of Procurement Programs

To: Division Engineers
District Engineers
Commanding Officer, Army Map Service
Commanding General, The Engineer Center
Commanding Officer, Engineer Research and Development Laboratories
Chief, Chicago Procurement Office, CE
Engineer Supply Officers, General Depots
Commanding Officers, Engineer Depots

1. For the information of and compliance by all concerned transmitted is copy of CP 79–FY 1951, issued by the Assistant Chief of Staff, G–4, 12 March 1951.

2. The inclosed directive rescinds paragraph 4 of CP Directive 51–FY 1951, 18 December 1950, relative to procurement by formal advertising, and substitutes a new paragraph in lieu thereof. Attention is directed to the fact that the revised paragraph 4 emphasizes that procurement by formal advertising will continue to be used except under the circumstances stated therein. Accordingly the third sentence of paragraph 2 of multiple letter ENGAC, 22 December 1950, subject as above, is rescinded. All future procurement for military supply will be accomplished in full conformity with the policy set out in CP Directive 51, as revised in the inclosed CP Directive 79.

3. The policy relative to procurement by advertising for military construction contracts prescribed in multiple letter ENGAC 161, 16 March 1951, Subject: "Declaration of National Emergency—Policy and Authority for Construction and Architect-Engineer Contracts," as amended by the inclosed CP Directive 79, is reaffirmed.

4. The provisions of this multiple letter are applicable only to military contracts.

BY ORDER OF THE CHIEF OF ENGINEERS:

/s/ Craig Smyser,
CRAIG SMYSER,
Lt. Col., Corps of Engineers, Executive.

1 Incl. Cy CP Dir. 79–FY 1951

DISTRIBUTION:
10 Copies to each Div and Dist Engr
5 copies to each other addressee
3 copies to Review Branch and Control Branch, OEngr Comptr
20 copies to Legal Div
10 copies to Asst CsofEngrs for Military Constr and MS&P

DEPARTMENT OF THE ARMY,
OFFICE OF THE ASSISTANT CHIEF OF STAFF, G–4, LOGISTICS,
Washington 25, D. C., 12 March 1951.

G4/E1 15689
(CP Dir 79—FY 1951)

Subject: Declaration of National Emergency and Broadening the Industrial Base of Procurement Programs.

To: Chiefs of technical services; Commanding Generals, Continental Armies and the Military District of Washington; Commanding Generals, major oversea commands; and others, as indicated.

Distribution (a), (b), and (c). (See Incl to CP Dir 60—FY 1951).

1. Reference is made to CP Dir 51—FY 1951, file G4/E1 66037, same subject as above, dated 18 Dec 1951 with attached memorandum from the Under Secretary of the Army, same subject, same date.

2. Effective immediately, paragraph 4 of CP Dir 51 is rescinded and the following substituted therefor:

"4. Subject to such further instructions as may be issued by the Heads of Procuring Activities, during a period of national emergency declared by the

President or by Congress, procurement by formal advertising will continue to be used. Formal advertising, however, will not be used when such use will adversely affect the acceleration of procurement or the broadening of the industrial base, or when in conflict with paragraph 4 of the attached memorandum of the Under Secretary of the Army dated 18 Dec. 1951. In complying with provisions of this paragraph, formal advertising, normally, will be used in the following instances:

a. In the procurement of standard commercial supplies or services;

b. When the items being procured and the conditions are such that greater participation by small business can be obtained;

c. When procurement by formal advertising will expedite the consummation of the transaction or will obtain the required items more rapidly than by negotiation;

d. When there are no important factors to be considered in making the award, such as time of delivery, etc., other than price and it is anticipated that the supplies or services can be purchased more economically by formal advertising;

e. When the list of supplies to be solicited is extensive, full competition is desired and purchase by formal advertising will be accomplished more efficiently and expeditiously than by negotiation;

f. In such additional instances as are deemed to be desirable."

FOR THE ASSISTANT CHIEF OF STAFF, G–4:

[s] P. M. Seleen,
P. M. SELEEN,
Colonel, GSC, Chief, Current Procurement Branch,
Procurement Division.

DISTRIBUTION OF PREVIOUS CP DIRECTIVES:
CP Dir 77—(a), (b), and (c).
CP Dir 78—(a) and (b).

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., April 17, 1951.

ENGAC 161

Subject: Letter Order Contracts
To: Division Engineers
District Engineers
Chief, Chicago Procurement Office, CE
Commanding Officer, Army Map Service
Commanding Officer, Engineer Research and Development Laboratories

1. Reference is made to:

a. Multiple letter ENGAC, 22 December 1950, subject: "Declaration of National Emergency and Broadening the Industrial Base of Procurement Programs" as amended by multiple letter of same symbol and subject, 23 January 1951.

b. Multiple letter ENGAC, 16 March 1951, subject: "Declaration of National Emergency—Policy and Authority for Construction and Architect-Engineer Contracts" as amended by multiple letter ENGAC 161, 2 April 1951, subject: Delegation of Authority to Make Determinations and Findings in Support of Cost-Reimbursement Type Contracts.

2. Requests for authorization to award letter order contracts in excess of the above referenced authorization will be forwarded to the Chief of Engineers, Attention: ENGAC, when:

(*a*) It is essential to give the contractor a binding commitment in order to permit him to commence work immediately; or

(*b*) Nature of the work involved prevents the preparation of definitive requirements or specifications, thereby making it impossible to negotiate a definitive contract at that time.

Such requests for authority to award letter order contracts must indicate the existence of the above requirements and shall include the following information, where applicable:

(*a*) Statement as to the necessity and advantage to the Government of the use of the proposed letter order contract.

(*b*) Name and address of proposed contractor.

(*c*) Location where contract is to be performed.

(*d*) Brief description of supplies and quantities to be furnished or services to be rendered.

(*e*) Duration of letter order contract in number of days from date of execution.

(*f*) Amount of letter order contract.

(*g*) Total estimated definitive contract amount, including estimated cost of:

1. Facilities.
2. Special tooling, equipment, etc.
3. Activation or reactivation.
4. Training of personnel.
5. Subcontracting.

(*h*) Estimated delivery schedule.

(*i*) Type of definitive contract proposed (fixed-price, cost-plus-a-fixed-fee, etc.).

(*j*) Statement as to whether the definitive contract will contain all required standard clauses in accordance with ASPR, Procurement Circulars, Army Procurement Procedures, and other Department of the Army directives.

(*k*) List of all standard optional clauses which will be made a part of the definitive contract, including:

1. Patent clauses.
2. Copyright clause.
3. Special tooling clause.
4. Government furnished property clause.
5. Facility agreement.
6. Price redetermination clause.
   a. Form number.
   b. Percentage of upward revision.

(*l*) Statement that the provisions of subparagraphs (*j*) and (*k*) above will be made a condition of the subject letter order contract.

(*m*) Statement that the minimization of risk, through inclusion of the price redetermination clause, will be given due consideration in determining the rate of profit to be allowed, with further attention given to the amount of each of the following as compared to the total estimated contract amount:

1. Material.
2. Subcontracting.
3. Purchased Parts.
4. "Off-the-Shelf" Items.

(*n*) Source of funds to be used in this procurement, showing:

1. Total allocated.
2. Total obligated to date, exclusive of this letter contract.

(*o*) Statement that research and development funds will not be used when the work to be covered is not for research and development.

(*p*) Statement that the definitive contract will be executed with a minimum of delay.

(*q*) Statement that the Chief of Engineers, Attention: ENGAC, will be promptly informed of the date of execution of the letter order contract so that such information can be transmitted promptly by telephone to the Assistant Chief of Staff, G–4.

(*r*) Statement that request for approval of award of definitive contract, if required, will be forwarded to the Chief of Engineers, Attention: ENGAC, so as to reach the Assistant Chief of Staff, G–4 (Attention: Chief, Current Procurement Branch), no later than 15 days prior to the expiration of the letter order contract.

(*s*) Statement that the letter order contract will be reported on "Industrial Procurement Action Report", DD Form 350, 1 May 1950, *in the amount of the letter contract*; and that subsequent reports will be submitted, when and if changes are made in the amount of obligation of the *letter contract, only in the amount of such change*, whether plus or minus. In this connection, attention is directed to paragraph 7, of the multiple letter of 16 March 1951, referenced in paragraph b above, wherein an additional statement under Item 24 of DD Form 350 is required stating the estimated amount of total construction cost. When the formal contract is executed, report will be made only in the amount of the definitive contract, *less the cumulative obligation under the letter contract and any changes thereto.*

3. The provisions of this multiple letter have no application whatsoever to projects financed from Civil Funds appropriated to the Corps of Engineers.

BY ORDER OF THE CHIEF OF ENGINEERS:

Craig Smyser,
CRAIG SMYSER,
Lt. Col., Corps of Engineers, Executive.

DISTRIBUTION:
10 copies to each addressee.
3 copies to Review Branch, OEngr Comptr.
20 copies to Legal Div.
10 copies to Asst CsofEngrs for Mil Constr and MS&P.

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., 23 May 1951.

ENGAC 161

Subject: Letter Contracts

To: Division Engineers
District Engineers
Chief, Chicago Procurement Office, CE
Commanding Officer, Army Map Service
Commanding Officer, Engineer Research and Development Laboratories

1. Reference is made to:

(*a*) Paragraph 1 of multiple letter ENGAC 161, 23 January 1951, Subject: "Declaration of National Emergency and Broadening the Industrial Base of Procurement Programs."

(*b*) Paragraph 5 of multiple letter ENGAC 161, 16 March 1951, Subject: "Declaration of National Emergency-Policy and Authority For Construction and Architect-Engineer Contracts.

(*c*) Multiple letter ENGAC 161, 17 April 1951, Subject: "Letter order Contracts."

(*d*) APP 3–408.1 through 3–408.6.

2. For the information of and compliance by all concerned transmitted is copy of communication from the Assistant Chief of Staff, G4, to the Chiefs of technical services, 30 April 1951, Subject: "Increasing Scope of Letter Contracts".

3. As indicated in the above references and the inclosed communication, Letter Contracts will be utilized only in those cases where plans and specifications cannot be prepared in sufficient time to negotiate a definitive contract or where for other justifiable reasons it is necessary to give the contractor a binding commitment preliminary to completing final negotiations. When letter contracts are used every effort will be made to expedite the execution of a definitive contract far in advance of completion of the project and before large sums are expended under the letter contract.

4. Where there are prolonged delays in the negotiation and execution of a definitive contract, contracting officers may subject themselves to criticism based upon a possible insinuation that their ultimate negotiation involves a cost plus a percentage of cost contract in violation of Federal statutes.

5. Continued extensions of and the addition of new work to letter contracts will also be avoided in every instance possible. Under no conditions will letter contracts be extended more than 120 days without prior approval of the Assistant Chief of Staff, G–4 as provided in APP 3–408.3.

6. These above instructions apply only to military supply and Construction contracts.

BY ORDER OF THE CHIEF OF ENGINEERS:

Craig Smyser,
CRAIG SMYSER,
Lt. Col., Corps of Engineers, Executive.

1 Incl: copy Commun, G–4, 30 April 51.

DISTRIBUTION: Distribution A; 5 copies to ERDL; 3 copies to Review Branch, OEngr Comptr; 10 copies to Asst CsofEngrs for Mil Constr and MS&P; 20 copies to Legal Div and for information: 1 copy to AC of S, G–4, Attn: Chief, Proc. Div, 5 copies to District Engineer, Okinawa District and CIC, Far East Command, Attention: Engineer.

INCREASING SCOPE OF LETTER CONTRACTS

G4/E–1 25831 APR. 30, 1951.

Chief of Ordnance
Chief of Engineers
Chief Signal Officer
The Quartermaster General
Chief of Transportation
Chief Chemical Officer
The Surgeon General

1. Effective immediately, no modifications to existing letter contracts will be made solely for any of the following purposes:

a. Increasing the quantity to be procured.

b. Addition of quantities of other items, whether or not related.

c. Providing for facilities with which to manufacture quantities in excess of those included in the original letter contract.

2. Numerous letter contracts are in existence which have been modified for the purposes indicated above, and these letter contracts are apparently no nearer conversion to definitive contracts than they were several months ago. Also to tie the original quantity to the new quantity is resulting in large increases in the cost of all items, and the Government is not receiving the benefit of prices in effect at the time a large portion of the material was purchased by the contractor.

3. In order that the instructions of the Under Secretary of the Army may be complied with, the following procedure must be followed:

a. Convert letter contracts with the minimum of delay covering the quantities and scope as originally approved, or as amended to date.

b. Issue supplemental agreement to the formal contract to effect any change in scope.

4. With reference to paragraph 3 above, the provisions of Army Procurement Procedure, March 1951, as amended, will be complied with.

5. It is desired that instructions embodying the above be issued to all procuring activities, without delay, with information copy furnished to this office.

FOR THE ASSISTANT CHIEF OF STAFF, G–4.

[s] John K. Christmas
JOHN K. CHRISTMAS,
Major General, GSC,
Chief, Procurement Division.

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., 11 July 1951.

ENGAC 161

Subject: Procedure in Negotiating Fixed Price Military Construction Contracts.

To: Division Engineers
District Engineers

1. Reference is made to the Corps of Engineers conference on contracting and related activities held on 18 and 19 April 1951 at Chicago, Illinois. Question 14 of the conference transcript, which pertains to disclosure of quotations in the course of negotiation of construction contracts, is discussed and the views of the Chief of Engineers are stated. Since the release of this transcript circumstances have arisen warranting reexamination of the policy pursued on this subject. This multiple letter prescribes the procedure which will be recognized and pursued hereafter in the negotiation of such contracts.

2. In soliciting informal quotations for the purpose of negotiating lump-sum military construction contracts a reasonable number of competitive proposals should be sought. Those from whom informal proposals are solicited will be informed that the contract to be made will be awarded pursuant to negotiations. In order to utilize the services of qualified contractors and in order that the time sought to be gained by negotiations will not be lost, no publicity will be given to the impending negotiations or to the names of those who are requested to submit proposals.

3. Those invited to submit a quotation will be informed of the time and place where the quotations will be opened. Attendance at such openings need not be limited to those contractors who have submitted proposals but will not include the general public.

4. On opening of proposals you will announce each figure in total and indicate the apparent low proposal, but qualify your statement to the effect that this announcement is not final and that final determination will not be made until an opportunity is had to carefully review the proposals submitted. Under no circumstances will the Government's estimate be announced nor will any cost breakdowns or any costs or profit information submitted by any contractor be revealed to any other participants.

5. This multiple letter has no application to civil works contracts.

Lewis A. Pick,
LEWIS A. PICK,
Major General, Chief of Engineers.

Distribution:
Distribution A
3 copies to Review Branch, OEngr Comptr.
20 copies to Legal Div.
10 copies to Asst. CofEngrs for Mil Constr. and for information
5 copies each to District Engineer, Okinawa District and CIC, Far East Command, Attention: Engineer.

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., 12 July 1951.

ENGAC 161
Subject: Declaration of National Emergency—Policy and Authority for Construction and Architect-Engineer Contracts.

To: Deputy Chief of Engineers
Assistant Chief of Engineers for Military Construction
Division Engineers
District Engineers

1. Reference is made to multiple letter ENGAC 161, 16 March 1951, subject as above, and to subparagraph c. of paragraph 2 thereof, relative to "Determination and Findings—Authorization to Procure Architectural and Engineering Services" signed by the Under Secretary of the Army on 15 February 1951, a copy of which was attached as Incl. 2 of the referenced multiple letter.

2. Under date of 13 June 1951, the Under Secretary of the Army renewed the afore-mentioned determination and findings relative to authorization to procure architectural and engineering services, to be effective until 30 June 1952 (inclosure 1).

3. In accordance with the authority vested in me by the Under Secretary of the Army (Inclosure 1), I hereby renew the delegations relative to architect-engineer services previously made to the above addressees pursuant to paragraph 5 of the referenced multiple letter dated 16 March 1951, subject to all the limitations contained in said referenced multiple letter. Such delegations will remain effective until 30 June 1952, unless otherwise terminated by me.

4. Paragraph 10 of referenced multiple letter ENGAC 161, 16 March 1951, is revised by deleting the date 30 June 1951 and inserting in lieu thereof, 30 June 1952. Except as thus indicated, all other provisions of the above referenced multiple letter remain the same.

LEWIS A. PICK,
Major General, Chief of Engineers.

1 Incl.: 1. Cy Determination and Findings, 13 Jun. 51.
DISTRIBUTION:
Distribution A
5 copies to Deputy CofEngrs and Asst CofEngrs for Mil Constr
10 copies to Asst CofEngrs for MS&P, GG, The Engineer Center Army Map Service
5 copies to Review Branch, OEngr Comptr and ERDL
25 copies to Legal Div and Asst CofEngrs for Mil Constr, Attn: Executive Office.

JUN. 13, 1951.

DETERMINATION AND FINDINGS

AUTHORIZATION TO PROCURE ARCHITECTURAL AND ENGINEERING SERVICES

1. Under the provisions of section 601, Defense Appropriation Act, 1951 (P. L. 759, 81st Cong.), I determine that the existing facilities of the Department of Defense for Architectural and Engineering Services are inadequate, and that it will be advantageous to the national defense to procure by contract the services of architects and engineers or organizations thereof in accordance with section 15 of the act of 2 August 1946 (5 U. S. C. 55a), in connection with public works or utility projects for national defense purposes to be performed under the supervision of the Corps of Engineers. Accordingly, where the contract for services of architects and engineers or organizations thereof does not exceed $500,000, I hereby authorize the Chief of Engineers, and such other officers and individuals as he may personally designate, to procure, under the provisions of section 15 of the act of 2 August 1946 (5 U. S. C. 55a), such services of architects and engineers or organizations thereof as may be necessary in connection with public works or utility projects for national defense purposes to be performed under the supervision of the Corps of Engineers, at the following rate of compensation:

a. For Organizations.—The rate of profit in fixed-price contracts and the rate of fixed-fee in cost-plus-a-fixed-fee contracts shall be the minimum which can be negotiated, and shall not exceed the limitations as to maximum fees contained in applicable statutes, such as Section 4b, Public Law 413, 80th Congress, and the Act of August 7, 1939 (5 U. S. C. 221).

b. For Individuals.—Individuals shall be paid not in excess of $50 per day. There may also be paid the travel expenses of individuals, including actual transportation and per diem in lieu of subsistence while traveling from their homes or places of business to official duty station and return, as may be authorized by law.

2. Contracts and awards for architect and engineer services approved by the Chief of Engineers or the officers or individuals personally designated by him so to do in accordance with the preceding authorization shall comply with the following conditions:

a. All contracts will contain required standard clauses as well as such standard optional clauses as may be necessary to fully protect the interests of the Government.

b. Standard price redetermination clauses shall be included in all fixed-price contracts wherein no data are available to indicate reasonableness of price. Government estimates, independently prepared, may be used to determine reasonableness of price.

3. The authorization herein granted shall not extend beyond 30 June 1952. Nothing herein stated shall be construed to eliminate or waive any of the requirements of Section 616 of Public Law 759 as amended by Section 101 of Public Law 843, 81st Congress, in so far as such requirements may be applicable. Contracts for services of architects and engineers or organizations thereof in connection with projects for which the costs exceed $500,000 shall be submitted to me for approval under present procedures.

/s/ Archibald S. Alexander,
ARCHIBALD S. ALEXANDER,
Under Secretary of the Army.

[Incl. 1]

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., 13 August 1951.

ENGAC 161

Subject: Approval of Award of Contracts of Less than $100,000

To: Division Engineers
District Engineers
Chief, Chicago Procurement Office, CE
Commanding Officer, Army Map Service
Commanding General, The Engineer Center
Commanding Officer, Engineer Research and Development Laboratories

1. References:

a. Multiple letter, ENGAC, 22 December 1950, Subject: "Declaration of National Emergency and Broadening of Industrial Base of Procurement Program," as amended.

b. Multiple letter, ENGAC, 16 March 1951, Subject: "Declaration of National Emergency—Policy and Authority in Architect-Engineer Contracts," as amended.

c. APP 1–604.3b and 1–604.7b.

2. Paragraphs 5 of the above referenced multiple letters delegated the authority to approve awards of negotiated contracts to specified officers. The authority contained in the referenced letters and in the cited paragraphs of APP enlarges the scope of authority to approve awards and was not intended to reduce the authority previously held by contracting officers to enter into negotiated contracts without obtaining approval of higher authority.

3. Therefore, contracts, by reference 1 (c) above, may be awarded and executed by contracting officers without approval of other authority if the contract is within the limits of the contracting officers' authority and if the amount involved is not in excess of $100,000. Any award of such negotiated contracts or modifications involving an amount in excess of $100,000 is subject to obtaining award authority as stated in references 1 (a) and (b) above.

4. This multiple letter applies to military contracts only.

BY ORDER OF THE CHIEF OF ENGINEERS:

Craig Smyser,
CRAIG SMYSER,
Colonel, Corps of Engineers, Executive.

Distribution:
Distribution A
5 copies to Review Branch, OEngr Comptr
5 copies to Asst CofEngrs for Mil Constr
5 copies to Asst CofEngrs for MS&P
25 copies to Legal Division

OCOENGR, DA, Washington, D. C. 1 OCTOBER 1951. UNCL
Routine TT

ALL DIVISION ENGINEERS
From: ENGAC 1174

Ref O&R 7103.08 A and Bpd pending revision of ref para of O&R cma dist and div engrs are authorized to award formally advertised mil contracts without monetary limit under the fol conditions cln paren 1 paren the low bid is acptd smcln and paren 2 paren bids have been reed from at least two bidders pd above auth applies to both const and sup contracts cma subject to other O&R restrictions pd div pass to dist pd.

UNCL 1 1

ENGAC–301 54701. LEWIS A. PICK (WD),
Lieutenant General, Chief of Engineers.

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., 23 October 1951.

ENGAC 161
Subject: Procedure in Negotiating Fixed Price Military Construction Contracts.
To: Division Engineers
District Engineers

1. As a result of publicly opening the initial written proposals received in a recent negotiation of a construction contract, an undesirable situation developed which very likely could occur again. This appears to be a consequence of Army Procurement Procedures wherein new proposals may be considered up to the time when the award is finally made. Pending consideration of our request for changes in these regulations, the procedure of public opening and disclosure of such proposals will be discontinued.

2. Multiple letter ENGAC 161, 11 July 1951, subject as above, is rescinded.

G. J. Nold,
G. J. NOLD,
Major General, Deputy Chief of Engineers.

DISTRIBUTION:
Distribution A
3 copies to Review Branch, OEngr Comptr
20 copies to Legal Div.
10 copies to Asst. CofEngrs for Mil Constr and for information:
5 copies each to District Engineer, Okinawa District and CIC, Far East Command, Attention: Engineer

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., 25 October 1951.

ENGAC 161
Subject: Specification Changes in Letter Contracts
To: Division Engineers
District Engineers

1. For the information of and compliance by all concerned, communication from the Assistant Chief of Staff, G4, to the chiefs of technical services, 3 October 1951, subject as above is quoted below:

"1. It has been noted that a great many letter contracts are being continually extended in duration for the reason that specifications have been or will be changed.

"2. Letter contracts will not be extended in duration for the sole purpose of allowing additional time for the contractor to recompute the costs, caused by such specification changes, and for negotiation of a new contract amount prior to converting the letter contract to a definitive contract. In these cases, definitive contracts will be executed and amendments thereto will be made under authority of the 'Changes' article at such times as changes in specifications take place."

2. In those cases where the use of letter contracts is required, they should be converted promptly into definitive contracts.

BY ORDER OF THE CHIEF OF ENGINEERS:

Craig Smyser
CRAIG SMYSER
Colonel, Corps of Engineers, Executive.

DISTRIBUTION:
Distribution A
3 copies to Review Br, OEngr Comptr
5 copies to Asst CofEngrs for Mil Constr
20 copies to Legal Div
and for information:
5 copies to The Engineer Center: Army Map Service; Engr Research and Development Labs; Chicago Procurement Office, CE; Engineer Supply Offices, General Depots; and Commanding Officers, Engineer Depots
5 copies each to District Engineer, Okinawa District and CIC, Far East Command, Attention: Engineer

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31 OCT. 51. UNCL
Priority

OCE, Washington, D. C.

ALL DIVISION ENGINEERS

Recommendations as to any contractor proposed for a cost-plus-a-fixed-fee contract will be submitted to the Chief of Engineers for approval and will not be discussed with the contractors or others until clearance has been obtained from the Chief of Engineers or higher authority as the case may be for undertaking the work on a CPFF basis. Paragraph 4 D multiple letter ENGAC 161 DTD 16 March 51 subj declaration of national emergency—policy and authority for construction and architect-engineer contracts, is hereby rescinded. Attention is directed to section 602 Second Supplemental Appropriation Act 52 which requires specific approval in writing of Secretary of Defense on necessity for using a CPFF contract in excess of twenty-five thousand dollars within the U. S., where the work is to be financed by funds appropriated in that act. As in the past, district engineers will obtain prior clearance from the Chief of Engineers before making any commitments to use a CPFF contract. This action will be taken regardless of whether the CPFF contract is to be for work in the U. S. or overseas and regardless of amount. Adequate reasons in justification therefor will be presented. Notify districts. End. ENGAC–1347

---

6 Nov. 51.
ENGAC 1347

ALL DIVISION ENGINEERS, CE

From: ENGAC 1370 MYMSG 1347, 2 Nov. 1951

2nd sentence of said MSG should be deleted and the following substituted therefor CLN quote para 4 D multiple ltr ENGAC 161 dated 16 March 1951, subject CLN declaration of national emerg dash policy and auth for construction and architect-engineer contracts CMA is hereby modified to the extent that it is in conflict with the above PD unquote notify districts.

[Corrected copy]

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., 20 November 1951.

ENGAC 161
Subject: Negotiation of Cost-Plus-a-Fixed-Fee Contracts Requiring Approval of Chief of Engineers or Higher Authority
To: Division Engineers
District Engineers

1. This letter pertains to the negotiation of cost-plus-a-fixed-fee contracts where the award must be authorized by the Chief of Engineers or higher authority.

2. In order to avoid duplication of effort and successive negotiations brought about by requirements of the approving authority, it is deemed advisable to conduct the final negotiation of all cost-plus-a-fixed-fee contracts in the Office of the Chief of Engineers whenever the contract must be approved by the Chief of Engineers or higher authority.

3. Your attention is directed to the provisions of Section 602 of the Second Supplemental Appropriation Act, 1952 (Public Law 254, 82nd Congress, approved November 1, 1951) which requires the specific approval in writing of the Secretary of Defense on the necessity for using a cost-plus-a-fixed-fee contract in excess of $25,000 within the United States, where the work is financed by funds appropriated in that act. As in the past, the District Engineer will obtain prior clearance from this office before using this form of contract, either in the United States or overseas, and will present reasons in justification for so doing. The procedure now in effect for obtaining approval of the selected list of contractors with whom negotiations are proposed will be continued in force (Reference teletype instructions, dated 2 November 1951 Symbol ENGAC–1347 to all Division Engineers in which instructions were contained to notify District Engineers as amended by teletype ENGAC 1370, 7 November 1951).

4. The negotiation of any cost-plus-a-fixed-fee contract of the magnitude covered by this letter will be in two phases. The first step will involve all the preliminary work, including discussion of technical and administrative details at the district level. This action will be known as the preliminary phase. The second step of the negotiations will be conducted in the Office of the Chief of Engineers and will concern itself with approving the details developed in the preliminary negotiation and arriving at a mutually acceptable fee. This action shall be called the final negotiation.

5. In connection with the preliminary phase, the contractor will need to study the provisions of the form of contract and learn as much as time will permit of the various requirements and methods of the Corps of Engineers with respect to the administration of such contracts. It is during this phase that the contractor should be made familiar with the cost principles applicable to cost-reimbursement type contracts, rental rates for contractor-owned construction equipment, policies of the Department of Army with respect to insurance coverage, Appendix "C" relative to policies governing non-manual employees of the contractor, employment agreements if an overseas project is involved, project scope and description, estimated project cost and estimated completion schedules. In this connection see paragraph 2–08 of the Corps of Engineers Manual for Negotiation of Construction, Architect-Engineer, Management and Related Services, dated 1 March 1951. In this preliminary phase, the District Engineer should obtain from the contractor essential data as to the contractor's present organization available for the job and assignments proposed for key personnel, his available construction plant and equipment, including the condition, age and location thereof, and all requisite information as to the contractor's capability to undertake a job of the magnitude involved. The contractor will also be required to state the extent and character of the work that he proposed to perform with his own forces and separately designate each phase of work that he intends to subcontract. Written notice of the date, time and place of the scheduled negotiation by the District Engineer will be forwarded to this office, Attention: ENGAC. To the extent conditions permit and if considered advisable, representatives of this office will be made available to assist the District Engineer in the preliminary negotiations.

6. If the contractor, after a sufficient review of the above data, plans, procedures and forms, is willing to accept the terms proposed by the Government (making due allowances for minor deviations) the negotiations will proceed further; should he refuse, this office should be contacted immediately for instructions. When the parties have reached a basis of understanding relative to all the items and details properly the subject for discussion at this period of the negotiations, the preliminary phase thereof will be concluded.

7. An accurate transcript will be made of the preliminary phase of the negotiations. This record, in triplicate, will be forwarded promptly to this office so that it can be reviewed *prior* to the commencement of final negotiations. This office will communicate with the Division Engineer and arrange an acceptable date for negotiating the final phase with the contractor. The District and Division Engineers and/or their designated representatives will attend this phase of the negotiations.

8. At the meeting with the contractor and field representatives on the final negotiations, the record of the prior proceedings will be discussed further with the contractor only to the extent that changes are considered advisable. Thereafter the parties will proceed to negotiate a fixed fee. Upon successful conclusion of the negotiation, this office will authorize the award of the contract, if within its authority. Otherwise it will prepare and submit a request to the Under Secretary of the Army for authorization to make the award.

At the same time, the Office of the District Engineer will prepare a contract for signature but not cause this instrument to be executed until receipt of information that the award has been authorized. The District will be notified through channels. A copy of the definitive contract will be sent to this office, Attention: ENGAC, immediately following execution.

9. A transcript of the final negotiations will be made and the record will be furnished, in triplicate, to the District Engineer concerned. The Office of the District Engineer shall constitute the official record office for the entire negotiation proceedings. The record of negotiations will be signed by both the contractor and the District Engineer.

LEWIS A. PICK,
Lieutenant General, Chief of Engineers.

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3 copies to Review Branch, OEngr Comptr
20 copies to Legal Div.
10 copies to Asst. CofEngrs for Mil Constr and for information
5 copies each to District Engineer, Okinawa District and CIC, Far East Command, Attention: Engineer.

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., 15 January 1952.

ENGAC 161

Subject: Letter Contracts for Supplemental Agreements.

To: Division Engineers
District Engineers
Commanding General, The Engineer Center
Commanding Officer, Engineer Research & Development Laboratories
Chief, Chicago Procurement Office, CE
Commanding Officer, Army Map Service
Rear Echelon, Middle East District
Rear Echelon, East Atlantic District
Rear Echelon, U. S. Engineer Group, Ankara

The use of letter contracts to place supplemental agreements to existing contracts for adding work to construction contracts or for the procurement of additional items on supply contracts will be held to an absolute minimum. No letter contract in this category will be issued without the prior approval of the Chief of Engineers. Requests for authority to issue a letter contract for this purpose will be submitted to the Chief of Engineers, Attention: ENGAC, and will include all information specified in APP 3–408.5, as amended.

BY ORDER OF THE CHIEF OF ENGINEERS:

Craig Smyser,
CRAIG SMYSER,
Colonel, Corps of Engineers, Executive.

DISTRIBUTION:
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3 copies to Review Branch OEngr Comptr
25 copies to Legal Division
10 copies to Assistant Chiefs of Engineers for Military Construction and Military Supply and Procurement
2 copies to Mr. Frank C. Anthony, Ohio River Division, and for Information
10 copies each to District Engineer, Okinawa District, and CIC, Far East Command, Attention: Engineer.

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., 7 March 1952.

ENGMM 600.1
Subject: Negotiation v. Advertising of Military Construction Contracts
To: Division Engineers
District Engineers
Officer-In-Charge, Rear Echelon, Middle East District
Officer-In-Charge, Rear Echelon, East Atlantic District
Officer-In-Charge, Rear Echelon, U. S. Engineer Group, Ankara

1. Reference is made to ASPR 3–102, APP 3–102 and multiple letter ENGAC 161, 16 March 1951, subject "Declaration of National Emergency-Policy and Authority for Construction and Architect-Engineer Contracts", as amended by multiple letters of the same symbol and file numbers dated 2 April 1951, subject: "Delegation of Authority to Make Determinations and Findings in Support of Cost-Reimbursement Type Contracts", 12 July 1951 and 22 January 1952, subject of both "Declaration of National Emergency-Policy and Authority for Construction and Architect-Engineers Contracts" also to multiple letter ENGAC 161, 12 April 1951, subject: "Declaration of National Emergency and Broadening the Industrial Base of Procurement Programs."

2. In the future all military construction contracts will be awarded pursuant to formal advertisement procedures unless otherwise approved by the Chief of Engineers.

3. If negotiation, or if limited invited bidding is considered desirable, full justification for such procedure in each case will be submitted to the Chief of Engineers and prior authority for such contracting method obtained before entering into negotiations or inviting limited competitive bidding.

BY ORDER OF THE CHIEF OF ENGINEERS:

CRAIG SMYSER,
Colonel, Corps of Engineers, Executive.

DISTRIBUTION:
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5 copies to Dep. CofEngrs
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5 copies to District Engineer, Okinawa District and
10 copies to CIC, FEC, Attn: Engineer
2 copies to Mr. Frank C. Anthony, Ohio River Division

(Army procurement procedure)

2–102 *Use of Formal Advertising.*

a. Policy.—During a period of national emergency declared by the President or by the Congress, procurement by formal advertising will continue to be used, as the preferred method of purchasing, except when procurement by negotiation is authorized pursuant to ASPR and APP 3–201.

b. Lists of Bidders.—Current lists of bidders will be maintained. *Requests for inclusion on such lists will receive prompt and courteous attention.* Lists of bidders will be maintained in accordance with ASPR 2–202 and shall not include the name of any person or firm appearing in the "Consolidated Listing of Suspended and Ineligible Contractors and Disqualified Bidders" (APP 1–303.4).

c. Classified contracts.—Procurements classified as confidential, or higher, shall not be effected by formal advertising, except when the Head of a Procuring Activity considers this method to be in the interest of the Government.

O & R 7103.08

h. *Conditions governing award of construction contracts.* (1) The following conditions must exist to justify awards of construction contracts under *a* and *b* above:

(*a*) The contract was duly advertised.

(*b*) Bona fide bids were submitted by more than one bidder covering the entire job.

(*c*) The amount of the contract is within the total authorized by the construction directive after due allowance has been made in the amount for Government costs, plus centrally procured items, plus costs of material furnished by the

district engineer, plus the costs of work to be performed by the Signal Corps, plus contingency to cover any possible change orders to the contract, plus any other charges which should be made against the job.

(*d*) The amount of the award does not exceed by more than 15 percent the Government estimate of cost (including in the Government estimate allowance for contractor's profit).

(*e*) No appeal has been made from a decision of the Division or District Engineer covering a protest to the specifications or to the award which cannot be satisfactorily adjusted by the Division or District Engineer.

(*f*) The proposed award conforms to all other applicable provisions of JPR and O & R.

(2) When the conditions in (1) above do not exist the case will be forwarded with full details to the Chief of Engineers, attention: Assistant Chief of Engineers for Military Construction.

* * * * * * *

O & R 7103.10 *Contracts Requiring Approval of the Chief of Engineers*

Subject to the requirements of the preceding paragraph, the following contracts will be executed subject to the approval of the Chief of Engineers:

a. All contracts not executed on standard forms.

b. All contracts executed on standard forms where material deviation has been made.

c. All supplemental agreements and change orders effecting a material change in the provisions of the prime contracts to which they relate.

d. All supplemental agreements executed under authority of Section 17 of the "Contract Settlement Act of 1944," the Act of 1 July 1944 (58 Stat. 665; 41 U. S. C. Sup. 117).

e. All patent agreements. (See paragraph 7111.17 b.)

f. All relocation agreements entered into on ENG Form 1354 (Contract for Relocation, Rearrangement, or Alteration of Facilities—Lump Sum) or ENG Form 1355 (Contract for Relocation, Rearrangement, or Alteration of Facilities—Cost Reimbursable). (See paragraph 7101.07a.)

LIST OF WITNESSES

	Page
Carey, H. F	1
Hardin, Brig. Gen. J. R	1
Seybold, Brigadier General	38
Zackrison, H. B	1

INDEX

A

Architect engineers:
- Selection of — 70
- Supervision over — 69

Austerity standards of construction, instances of requests by Army for, exceeding — 64

Austerity standards of barracks construction, description of — 65

B

Barracks and messing designs, difference between Air Force and Army — 10

Benicia Arsenal, Calif — 106

C

California Institute of Technology, Pasadena, Calif., elaborate construction at — 67

Camp Detrick, Md — 72

Camp Rucker, Ala — 74

Changes in plans, comparison with Air Force — 73

Contracts:
- Cost plus fixed fee, use of — 4
- Contractors, inspection by — 36
- Disadvantages and deficiencies in — 21, 26
- Operation of — 62
- Division of authority in letting of — 13, 111
- Obligations under various types of — 79
- Types of — 16

E

Engineering Depot, Granite City, Ill — 81

Engineer personnel policies:
- Active units, feasibility of calling in — 52
- Availability of engineer personnel — 24, 39, 52
- Estimates, discussion of practice of not checking — 25
- Qualified personnel, problem of finding — 40
- Reserve officers:
  - Calling in, restrictions on — 7, 41, 45, 51
  - Captain, limitation on number above grade of — 43
  - Defects in operations under emergency program — 55
  - Preference to select type of service — 48
  - ROTC, utilization of — 46
- Structures of Corps of Engineers for meeting emergency situations, value of — 54

F

Field examinations to effect economies in construction — 71

Fort Campbell buildings, square foot cost of — 67

M

Page
Military construction program, supervision of 6

N

Niagara Falls Chemical Corps plant 103
Niskayuna Ordnance Depot, N. Y 86

O

Obligations:
Peaking of 2
Various types of contracts 79
Organizational difficulties, inefficient operations due to 26

P

Pasco Engineering Depot, Wash 75

R

Riverbank Ordnance Plant, California 97

S

Standardization of dormitories by Air Force, situation regarding 12
Standardized plans for buildings, development of 8, 16
Sunflower Ordnance Plant, Lawrence, Kans 16
Construction materials, overpurchase of 32
Correction action taken 18
Equipment, inadequacy of 22
Inspection by contracting and engineering firm 23
Management of project, report of Inspector General on 17
Rehabilitation and reactivation of facility, factors in 19
Manual to nonmanual employees, use of ratio as guide to efficiency of supervisory personnel 29

T

Tulalip Ordnance Depot and Mukilteo pier, Washington 82

W

Watervliet Arsenal, N. Y 85